

Annex 1: Measurement diagrams

to

TEST REPORT No.: 20835060b/15-C1

According to FCC Regulations:
Part 22, Part 24, Part 27

IC-Regulations:

RSS-132 Issue 3 RSS-133 Issue 6 RSS-139, Issue 2 RSS-Gen Issue 4

for

Gemalto M2M GmbH

Wireless Module PLS8-X FCC-ID: QIPPLS8-X IC: 7830A-PLS8X

PMN: Cinterion PLS8-X, HVIN: PLS8-X



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1. Measurement diagrams

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

8.43_CH9262_RMC

Common Information

Test Description: Radiated Spurious Emissions UMTS FDDII

Test Site Location: CETECOM GmbH Essen Test Site: Fully Anechoic Room (FAR) FCC Part 24 / RSS-133, Issue 6 Test Standard:

Operating Mode: UE allocated channel 9262 (fc = 1852.4 MHz) Environmental Conditions:

Humidity: 29%rH; Temperature: 25C

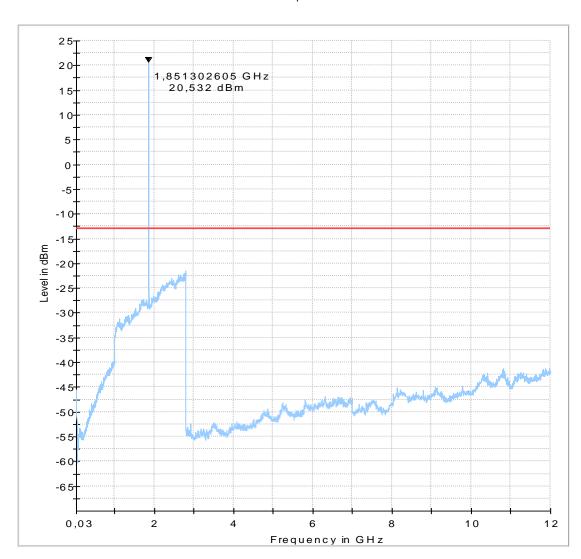
Operator:

EUT Information

EUT Name: WMC0534PX8 (f) Manufacturer: Gemalto

Serial Number: #004401081421380

Hardware Rev: 2.3 Software Rev: 02.502 Comment:





8.43a_CH9262_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 9262 (fc = 1852.4) Environmental Conditions: Humidity: 33%rH; Temperature:25°C

Operator: AHo
Comments 12-18GHz

EUT Information

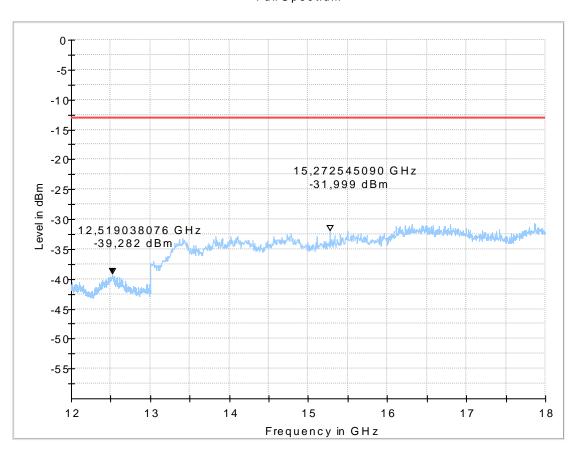
EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

 Serial Number:
 #0044010814211345

 Hardware Rev:
 2.3

Software Rev: 02.502 Comment: --





8.44_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 / RSS-133, Issue 6

Operating Mode: UE allocated channel 9400 (fc = 1880.0 MHz)

Environmental Conditions: Humidity: 29%rH; Temperature: 25C

Operator: kRe

EUT Information

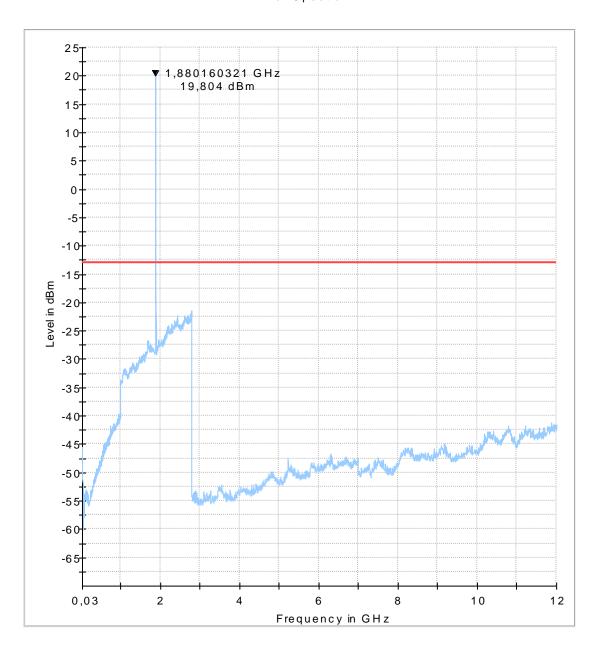
EUT Name: WMC0534PX8 (f)

Manufacturer: Gemalto

Serial Number: #004401081421380

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --

$Full\,S\,pec\,tru\,m$





8.44a_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 9262 (fc = 1852.4) Environmental Conditions: Humidity: 33%rH; Temperature:25°C

Operator: AHo
Comments 12-18GHz

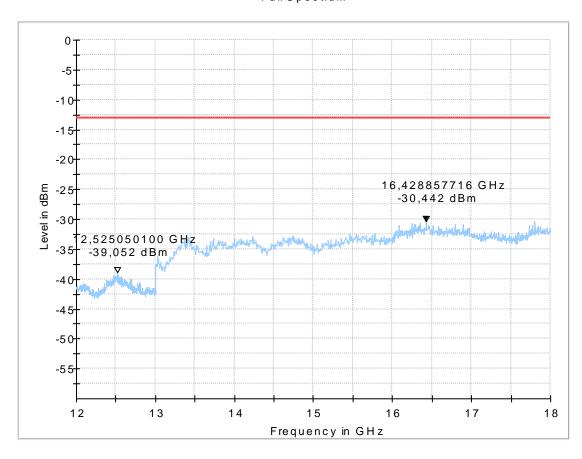
EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --





8.45_CH9538_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 / RSS-133, Issue 6

Operating Mode: UE allocated channel 9538 (fc = 1907.6 MHz), RMC Mode, PCL3 (+24dBm)

Environmental Conditions: Humidity: 29%rH; Temperature: 24C

Operator: kRe

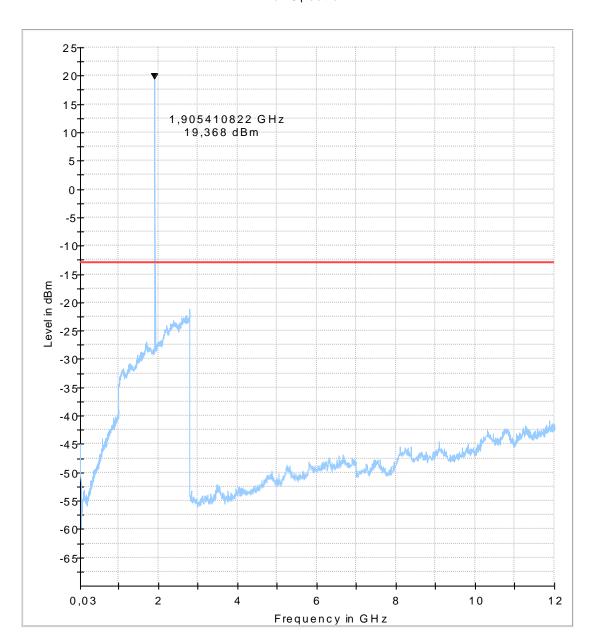
EUT Information

EUT Name: WMC0534PX8 (f)

Manufacturer: Gemalto

Serial Number: #004401081421380

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --





8.45a_CH9538_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 9262 (fc = 1852.4) Environmental Conditions: Humidity: 33%rH; Temperature:25°C

Operator: AHo Comments 12-18GHz

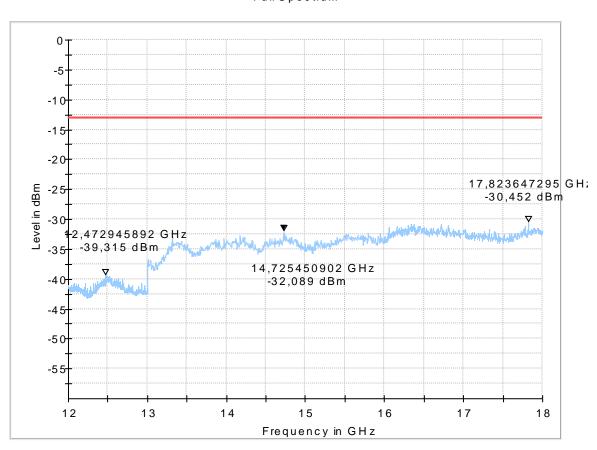
EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --





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

8.46 CH1312 RMC

Common Information

Test Description: Radiated Spurious Emissions UMTS FDDIV

Test Site Location: CETECOM GmbH Essen Test Site: Fully Anechoic Room (FAR) Test Standard: FCC Part 27 / RSS-139, Issue 2 Operating Mode: UE allocated channel 1312 (fc = 1712,4) **Environmental Conditions:** Humidity: 30%rH; Temperature: 24°C

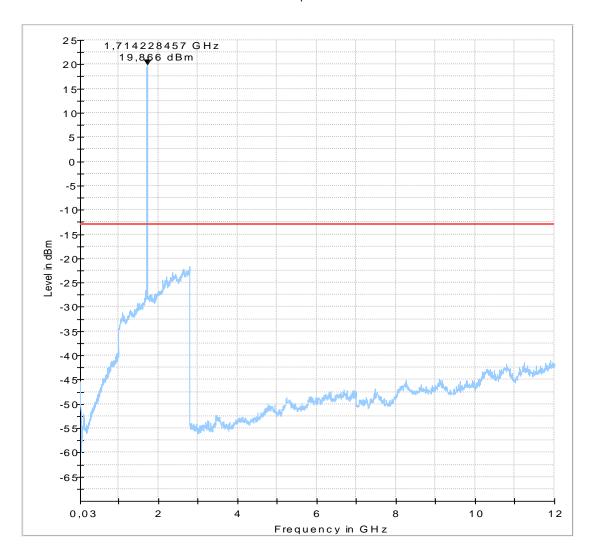
Operator:

EUT Information

EUT Name: WMC0534PX8 (f) Manufacturer: Gemalto

Serial Number: #004401081421380

Hardware Rev: 2.3 Software Rev: 02.502 Comment:





8.46a_CH1312_RMC

Common Information

Test Description: Radiated Spurious Emissions UMTS FDDIV Operating Conditions: CETECOM GmbH Essen

Test Site: Fully Anechoic Room (FAR)

Operating Mode:

Environmental Conditions:

CETECOM GmbH Essen

Fully Anechoic Room (FAR)

FCC Part 27 / RSS-139, Issue 2

Humidity: 30%rH; Temperature: 24°C

Operator Name:

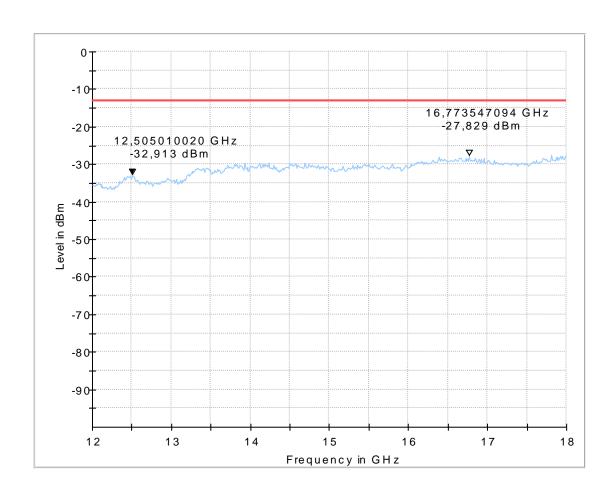
EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --





8.47_CH1450_RMC

Common Information

Test Description: Radiated Spurious Emissions UMTS FDDIV

Test Site Location:

CETECOM GmbH Essen

Test Site:

Fully Anechoic Room (FAR)

Test Standard:

Operating Mode:

Environmental Conditions:

CETECOM GmbH Essen

Fully Anechoic Room (FAR)

FCC Part 27 / RSS-139, Issue 2

UE allocated channel 1450 (fc = 1740)

Humidity: 30%rH; Temperature: 24°C

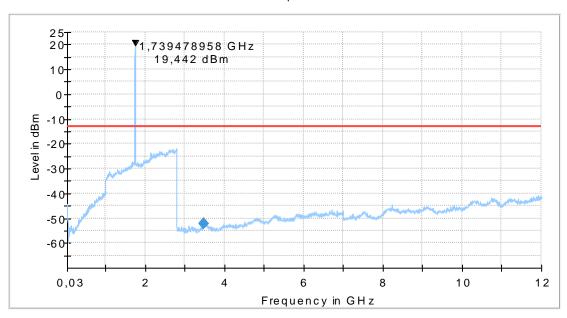
Operator: KRe

EUT Information

EUT Name: WMC0534PX8 (f)
Manufacturer: Gemalto
Serial Number: #004401081421380
Hardware Rev: 2.3

Software Rev: 02.502
Comment: --

Full Spectrum



Final_Result

Frequency (MHz)	MaxPea k (dBm)	Limit (dBm)	Margi n (dB)	Meas. Time (ms)	Bandwidt h (kHz)	Heigh t (cm)	Po I	Azimut h (deg)	Elevatio n (deg)	Corr. (dB)
3478.056112	-52.33	-13.00	39.33	10000.0	1000.000	155.0	V	96.0	0.0	-93.9

(continuation of the "Final_Result" table from column 17 ...)

Frequency (MHz)	Comment
3478 056112	06:44:19 - 28 03 2015



8.47a_CH1450_RMC

Common Information

Test Description: Radiated Spurious Emissions UMTS FDDIV

Test Site Location CETECOM GmbH Essen
Test Site Fully Anechoic Room (FAR)
Test Standard FCC Part 27 / RSS-139, Issue 2

Operating Mode UE allocated channel 1450(fc=1740) , RMC99

Environment Conditions Humidity: 33%rH; Temperature:25°C

Operator Name: AHo
Comment: 12-18GHz

EUT Information

EUT Name: WMC0534PX8 (d)

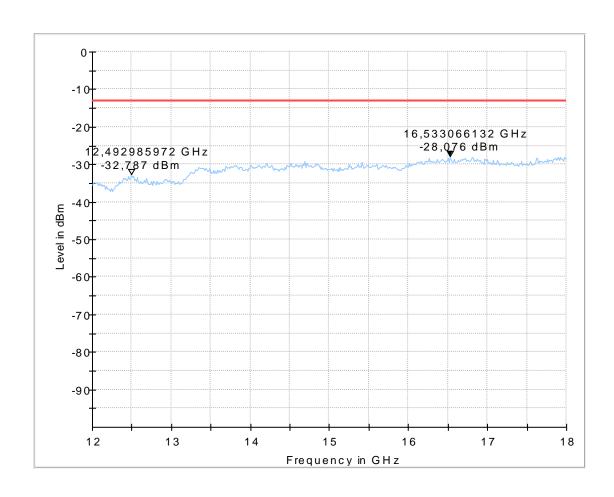
Manufacturer: Gemalto

 Serial Number:
 #0044010814211345

 Hardware Rev:
 2.3

 Software Rev:
 02.502

 Comment:
 -





8.48_CH1513_RMC

Common Information

Test Description: Radiated Spurious Emissions UMTS FDDIV

Test Site Location: CETECOM GmbH Essen Test Site: Fully Anechoic Room (FAR) FCC Part 27 / RSS-139, Issue 2 Test Standard:

Operating Mode: UE allocated channel 1513 (fc=1752,6 MHz), RMC99

Environmental Conditions: Humidity: 30%rH; Temperature: 24°C

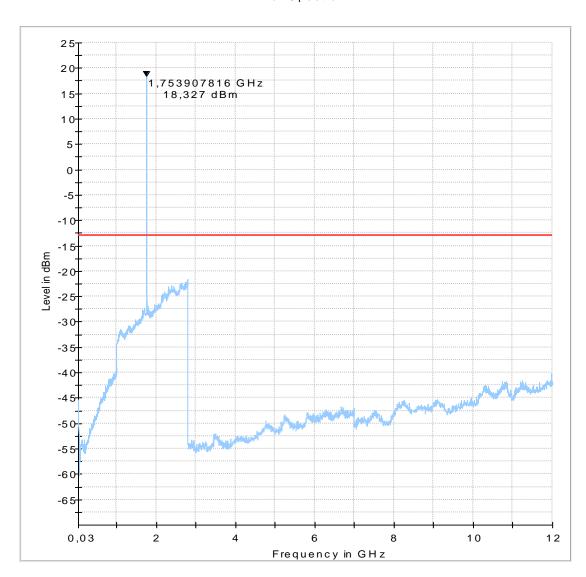
Operator: KRe

EUT Information

WMC0534PX8 (f) **EUT Name**: Manufacturer: Gemalto Serial Number: #004401081421360 Hardware Rev: 2.3

02.502 Software Rev:

Comment:





8.48a_CH1513_RMC

Common Information

Test Description: Radiated Spurious Emissions Part 27

Test Site Location: CETECOM GmbH Essen
Test Site: Fully Anechoic Room (FAR)
Test Standard: FCC Part 27 / RSS-139, Issue 2

Comm. Link: FDD4/LTE4, RMC99
Operating Mode: MS allocated channel 1513

Environmental Conditions: Humidity: 33%rH; Temperature: 25°C

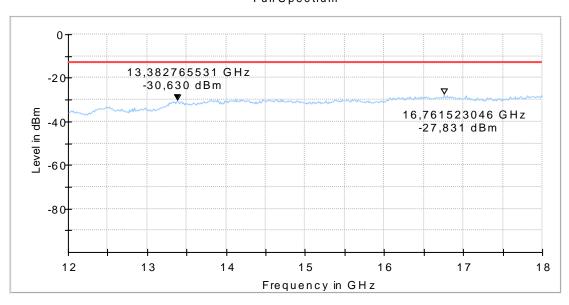
Operator: AHo Comments 12-18 GHz

EUT Information

EUT Name: WMC0534PX8 (d)
Manufacturer: Gemalto

Serial Number: #0044010814211345

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --





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

8.40 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) / RSS-132, Issue 3

Operating Mode: UE allocated channel 4183 (fc = 836.6), RMC99

Environmental Conditions: Humidity: 29%rH; Temperature: 25C

Operator: kmc

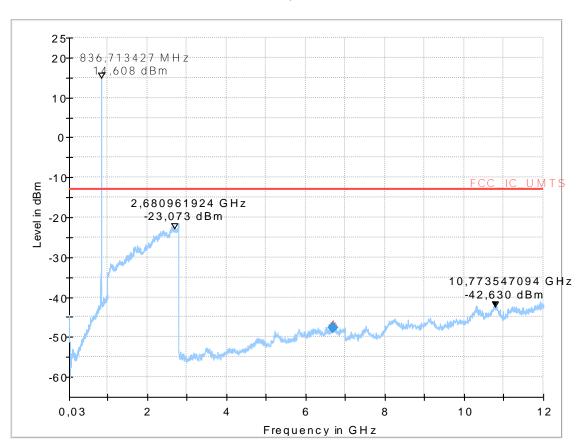
EUT Information

EUT Name: WMC0534PX8 (f)
Manufacturer: Gemalto

Serial Number: #004401081421380

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --

Full Spectrum



Final Result

Frequency (MHz)	MaxPe ak (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Po I	Azimut h (deg)	Elevatio n (deg)	Corr. (dB)
6695.080160	-47.64	13.00	34.64	10000. 0	1000.000	Н	53.0	90.0	-85.2



8.41_CH4233_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) / RSS-132, Issue 3

Operating Mode: UE allocated channel 4233 (fc = 846.6MHz), RMC Mode, PCL3 (+24dBm)

Environmental Conditions: Humidity: 29%rH; Temperature: 25C

Operator: kmo

EUT Information

Comment:

 EUT Name:
 WMC0534PX8 (f)

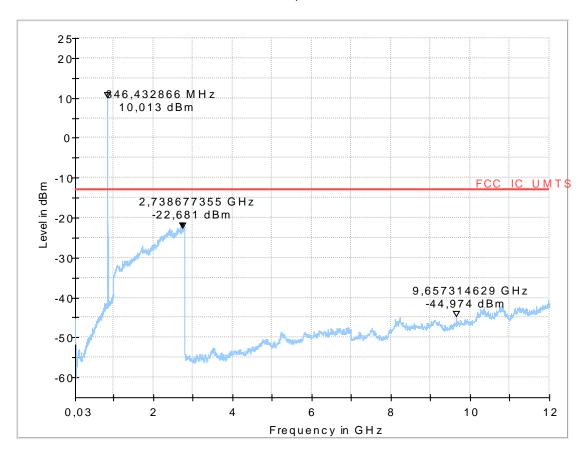
 Manufacturer:
 Gemalto

 Serial Number:
 #004401081421380

 Hardware Rev:
 2.3

 Software Rev:
 02.502

--





8.42_CH4132_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) / RSS-132, Issue 3

Operating Mode: UE allocated channel 4132 (fc = 826.4MHz), RMC Mode, PCL3 (+24dBm)

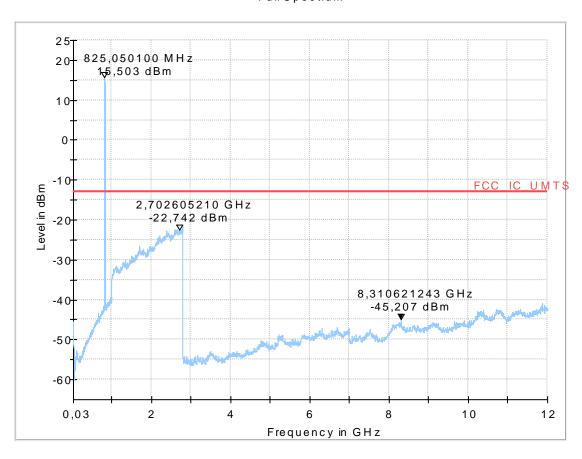
Environmental Conditions: Humidity: 29%rH; Temperature: 25C

Operator: kmo

EUT Information

EUT Name: WMC0534PX8 (f)
Manufacturer: Gemalto
Serial Number: #004401081421380
Hardware Rev: 2.3

Software Rev: 02.502 Comment: --





1.4. Radiated emissions on FDD Band II band-edge

9.20 BE R Ch9262 RMC

Common Information

Test Description: Radiated Band Edge Compliance UMTS FDDII

Test Site Location: CETECOM GmbH Essen
Test Site: Fully Anechoic Room (FAR)
Test Standard: FCC Part 24 / RSS-133, Issue 6

Operating Mode: UE allocated channel 9262 (fc = 1852.4 MHz), RMC99

Environmental Conditions: Humidity: 28%rH; Temperature: 24°C

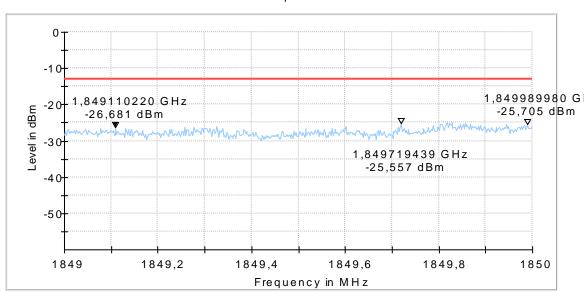
Operator: AHo/ HLa

EUT Information

EUT Name: WMC0534PX8 (d)
Manufacturer: Gemalto

Serial Number: #0044010814211345

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --





9.21_BE_R_Ch9538_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 / RSS-133, Issue 6

Operating Mode: UE allocated channel:9538 (fc = 1852.4 MHz), RMC99

Environmental Conditions: Humidity: 28%rH; Temperature: 24°C

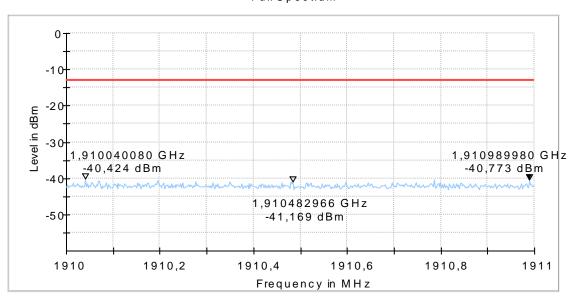
Operator: AHo/ HLa

EUT Information

EUT Name: WMC0534PX8 (d)
Manufacturer: Gemalto

Serial Number: #0044010814211345

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --





1.5. Radiated emissions on FDD Band IV band-edge

9.40 BE R Ch1312 RMC

Common Information

Test Description: Radiated Spurious Emissions UMTS FDDIV

Test Site Location: CETECOM GmbH Essen Fully Anechoic Room (FAR) Test Site: Test Standard: FCC Part 27 / RSS-139, Issue 2 Operating Mode: UE allocated channel 1513, RMC99 Environmental Conditions: Humidity: 24%rH; Temperature:27°C

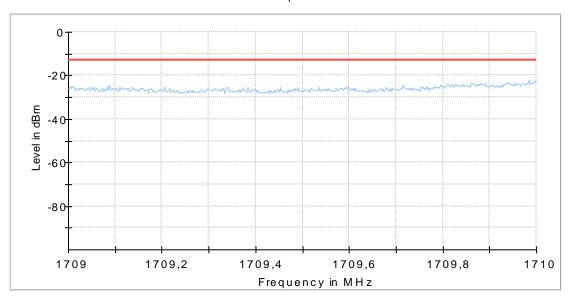
Operator: HLa

EUT Information

EUT Name: WMC0534PX8 (d) Manufacturer: Gemalto

#0044010814211345 Serial Number:

Hardware Rev: 2.3 02.502 Software Rev: Comment:





9.41_BE_R_Ch1513_RMC

Common Information

Test Description: Radiated Spurious Emissions UMTS FDDIV

Test Site Location:

CETECOM GmbH Essen

Test Site:

Fully Anechoic Room (FAR)

Test Standard:

Operating Mode:

Environmental Conditions:

CETECOM GmbH Essen

Fully Anechoic Room (FAR)

FCC Part 27 / RSS-139, Issue 2

UE allocated channel 1513, RMC99

Humidity: 24%rH; Temperature:27°C

Test SW Version: EMC32 V9.15.0

Operator: HLa

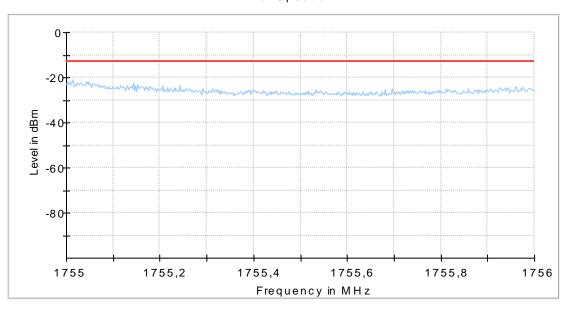
EUT - laying/standing position

EUT Information

EUT Name: WMC0534PX8 (d)
Manufacturer: Gemalto

Serial Number: #0044010814211345

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --





1.6. Radiated emissions on FDD Band V band-edge

9.50 BE R Ch4132 RMC

Common Information

Test Description: Band-Edge low - Radiated Spurious Emissions UMTS FDDV

CETECOM GmbH Essen Test Site Location: Fully Anechoic Room (FAR) Test Site:

Test Standard: FCC Part 22.917(a) / RSS-132 Issue 3 UE allocated channel 4132, RMC99 Operating Mode: Environmental Conditions: Humidity: 28%rH; Temperature: 24°C

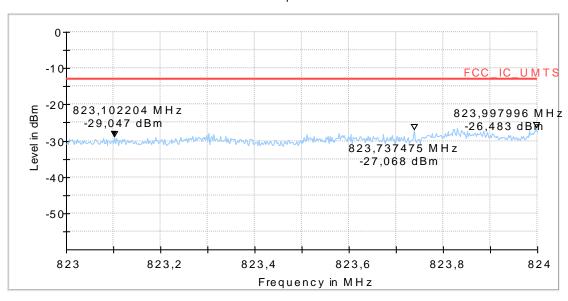
Operator: AHo/ HĹa

EUT Information

EUT Name: WMC0534PX8 (d) Manufacturer: Gemalto

#0044010814211345 Serial Number:

Hardware Rev: 2.3 02.502 Software Rev: Comment:





9.51_BE_R_Ch4233_RMC

Common Information

Test Description: Band-Edge low - Radiated Spurious Emissions UMTS FDDV

Test Site Location: CETECOM GmbH Essen
Test Site: Fully Anechoic Room (FAR)

Test Standard: FCC Part 22.917(a) / RSS-132 Issue 3
Operating Mode: UE allocated channel 4233, RMC99
Environmental Conditions: Humidity: 28%rH; Temperature: 24°C

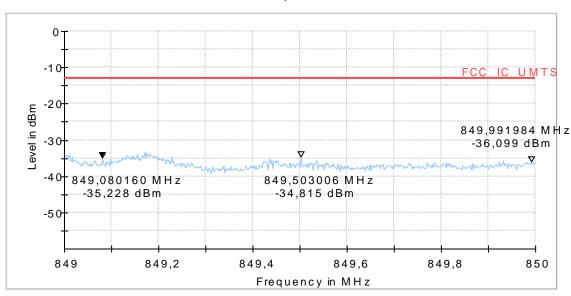
Operator: AHo/ HLa

EUT Information

EUT Name: WMC0534PX8 (d)
Manufacturer: Gemalto

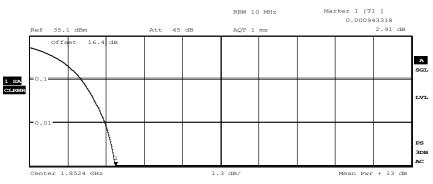
Serial Number: #0044010814211345

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --





1.7. Peak power output and PAPR-Value 1.7.1. FDD Band 2



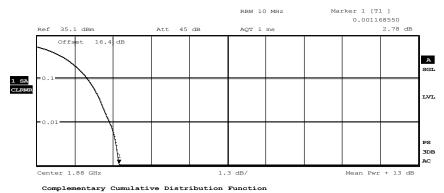
Complementary Cumulative Distribution Function NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
Mean 23.88 dBm
Peak 27.00 dBm
Crest 3.12 dB

10 % 1.73 dB
1 % 2.54 dB
.1 % 2.92 dB
.01 % 3.06 dB

Date: 1.AUG.2015 09:53:33

Channel 9262



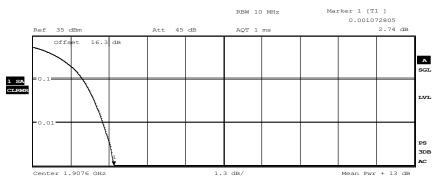
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
Mean 24.22 dBm
Peak 27.24 dBm
Crest 3.01 dB

10 % 1.71 dB
1 % 2.48 dB
.1 % 2.81 dB
.01 % 2.96 dB

Date: 1.AUG.2015 09:54:17





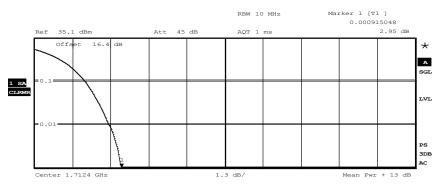
Complementary Cumulative Distribution Function NOF samples: 16000, Usable BW: 11.2MHz

Mean Peak Crest	Trace 1 23.53 dBm 26.51 dBm 2.98 dB
10 % 1 % .1 %	1.69 dB 2.38 dB 2.75 dB 2.90 dB

Date: 1.AUG.2015 09:55:33

Channel 9538

1.7.2. FDD Band 4

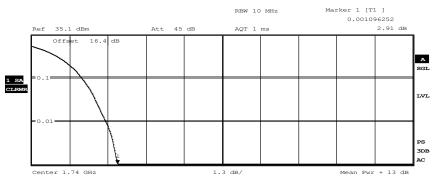


Complementary Cumulative Distribution Function NOF samples: 16000, Usable BW: 11.2MHz

Mean Peak Crest	Trace 1 23.65 dBm 26.83 dBm 3.18 dB
10 % 1 % .1 %	1.71 dB 2.52 dB 2.96 dB 3.15 dB

Date: 1.AUG.2015 09:42:03



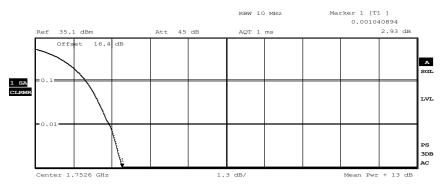


Complementary Cumulative Distribution Function NOF samples: 16000, Usable BW: 11.2MHz

		Ί.	race	∋ ⊥
Mean	,	2 4	.12	dBm
Peak	2	27	.41	dBm
Crest	_	3	.29	dВ
10 %	5	1	. 69	dВ
1 %	5	2	.52	dВ
.1 %	5	2	.92	dВ
.01 %	6	3	.15	dB

Date: 1.AUG.2015 09:44:40

Channel 1450



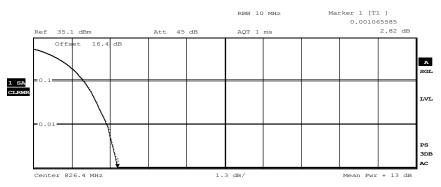
Complementary Cumulative Distribution Function NOF samples: 16000, Usable BW: 11.2MHz

Mean Peak Crest	Trace 1 24.19 dBm 27.30 dBm 3.11 dB
10 % 1 % .1 %	1.69 dB 2.50 dB 2.94 dB 3.08 dB

Date: 1.AUG.2015 09:45:51



1.7.3. FDD Band 5



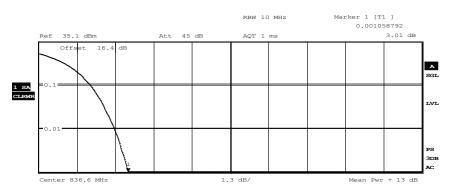
Complementary Cumulative Distribution Function NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
Mean 23.86 dBm
Peak 26.87 dBm
Crest 3.01 dB

10 % 1.69 dB
1 % 2.48 dB
.1 % 2.83 dB
.01 % 2.98 dB

Date: 1.AUG.2015 09:49:59

Channel 4132



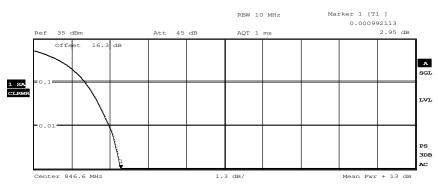
Complementary Cumulative Distribution Function NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
Mean 23.87 dBm
Peak 27.23 dBm
Crest 3.37 dB

10 % 1.73 dB
1 % 2.56 dB
.1 % 3.02 dB
.01 % 3.21 dB

Date: 1.AUG.2015 09:49:02





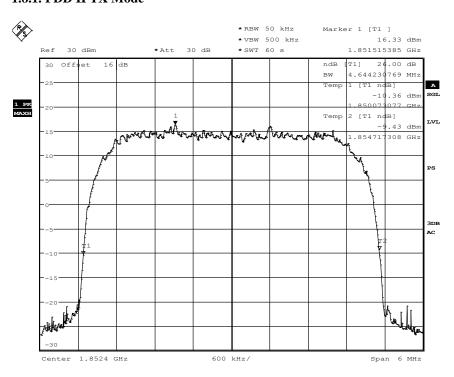
Complementary Cumulative Distribution Function NOF samples: 16000, Usable BW: 11.2MHz

	Trace	e 1
Mean	23.76	dBm
Peak	26.91	dBm
Crest	3.14	dB
10 % 1 % .1 %	1.73 2.56 2.96 3.13	dB dB

Date: 1.AUG.2015 09:58:07

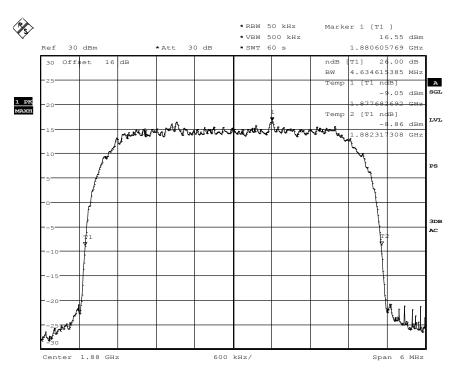


1.8. 26dBc Emission bandwidth 1.8.1. FDD II TX Mode



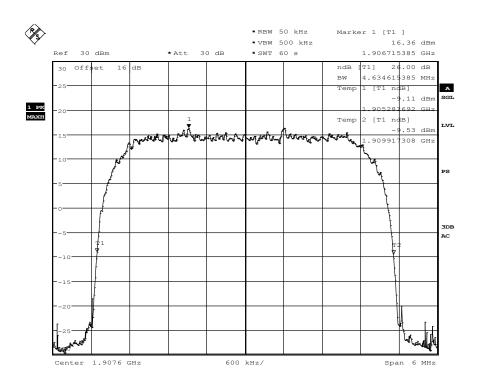
Date: 13.APR.2015 14:10:38

Channel 9262



Date: 13.APR.2015 14:08:44

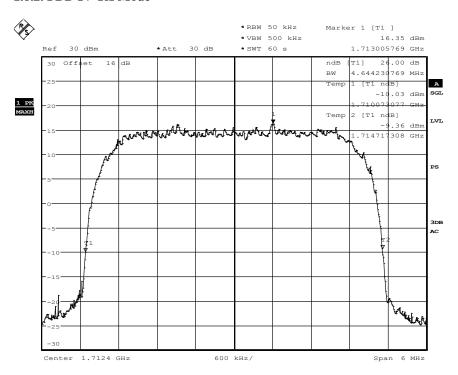




Date: 13.APR.2015 14:06:47

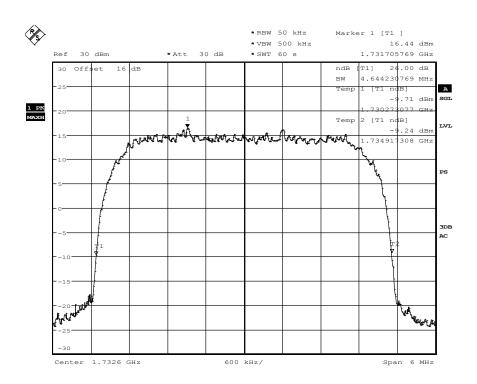
Channel 9538

1.8.2. FDD IV TX Mode



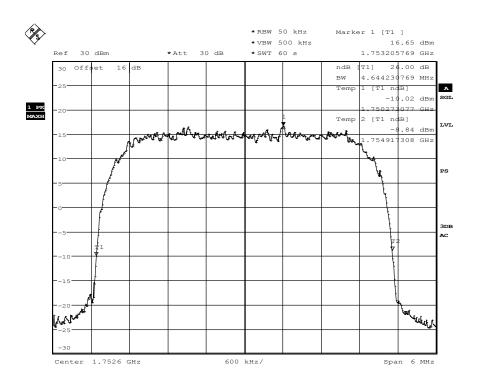
Date: 13.APR.2015 14:52:11





Date: 13.APR.2015 14:54:28

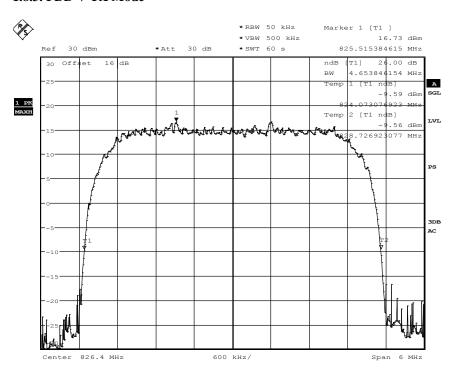
Channel 1413



Date: 13.APR.2015 14:57:30

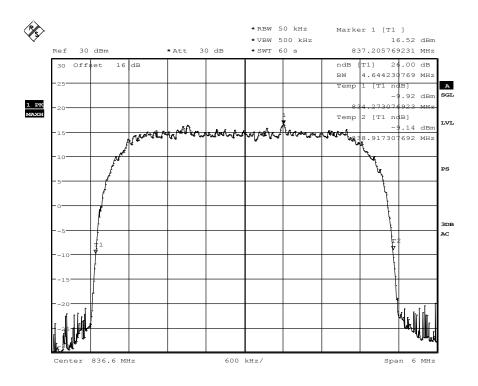
CETECOM

1.8.3. FDD V TX Mode



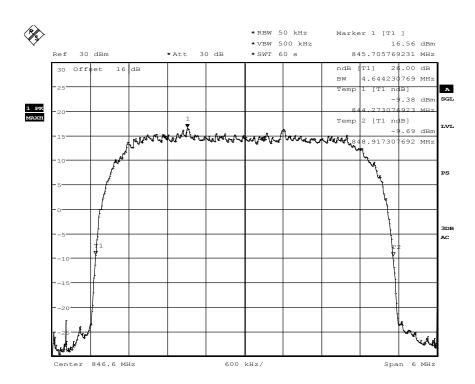
Date: 13.APR.2015 14:15:39

Channel 4132



Date: 13.APR.2015 14:19:23





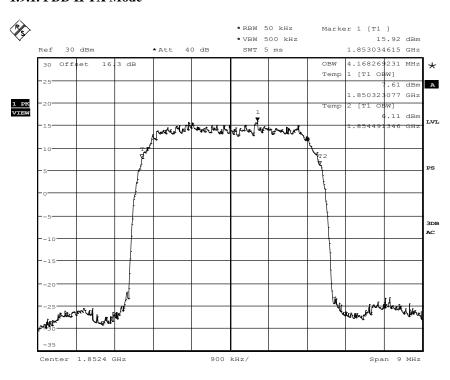
Date: 13.APR.2015 14:21:10

Channel 4233



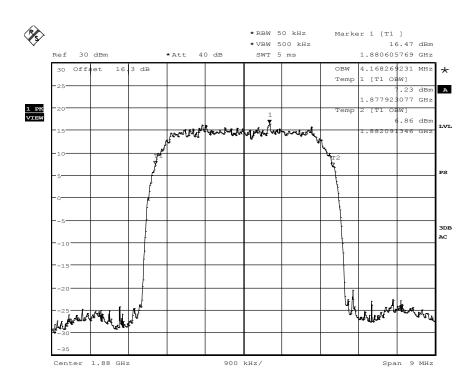
1.9. 99% Occupied bandwidth

1.9.1. FDD II TX Mode



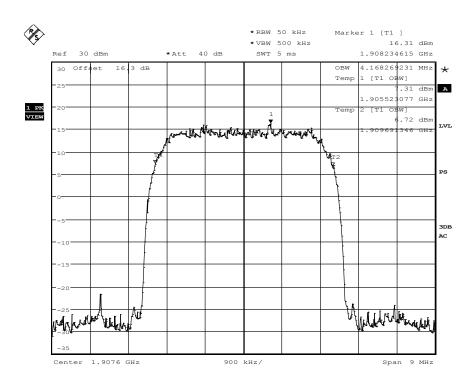
Date: 16.JUL.2015 10:26:23

Channel 9262



Date: 16.JUL.2015 10:29:50

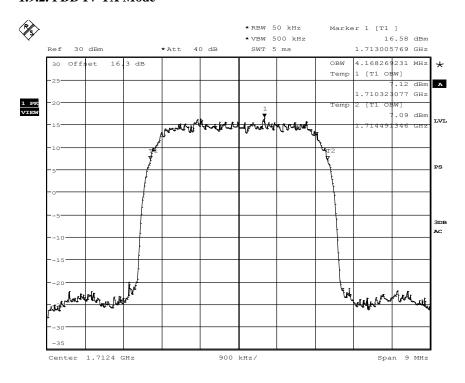




Date: 16.JUL.2015 10:32:31

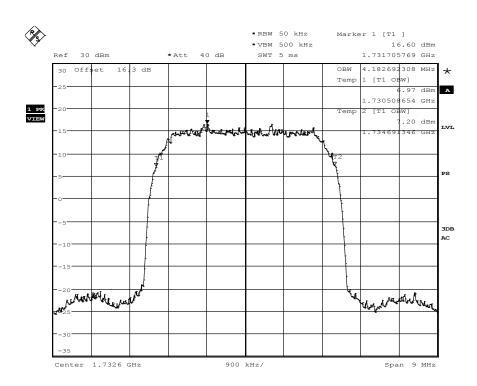
Channel 9538

1.9.2. FDD IV TX Mode



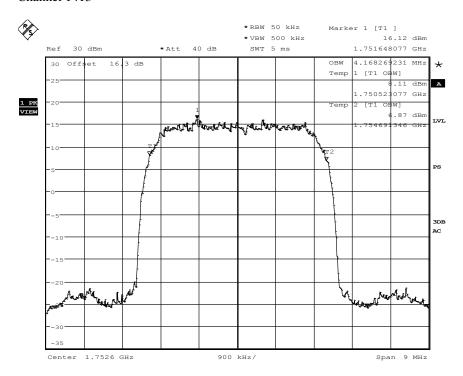
Date: 16.JUL.2015 10:41:48





Date: 16.JUL.2015 10:45:22

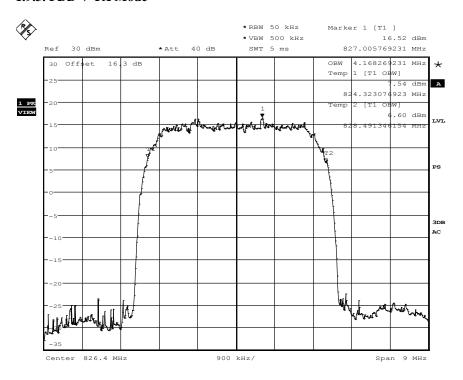
Channel 1413



Date: 16.JUL.2015 10:48:25

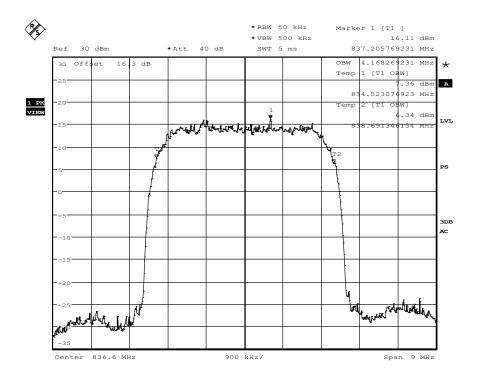


1.9.3. FDD V TX Mode



Date: 16.JUL.2015 10:53:11

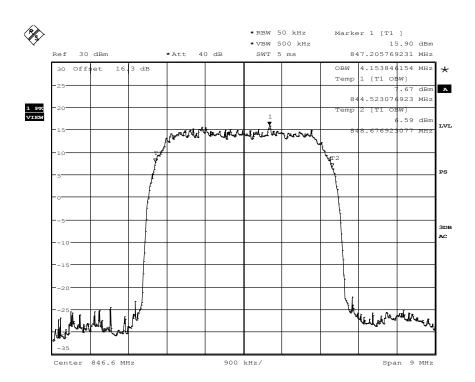
Channel 4132



Date: 16.JUL.2015 10:56:34

Channel 4183





Date: 16.JUL.2015 10:59:32

Channel 4233



1.10. Spurious emissions conducted on FDD Band II

Diagram No.: 36.60_Ch9262_RMC_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 24 / RSS-133, Issue 6

SW-Version: EMC32 V8.53.0

Operation mode: TX - FDD B2 (RMC), Channel 9262

Channel Bandwidth -Operator MFr
Comment: --

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345



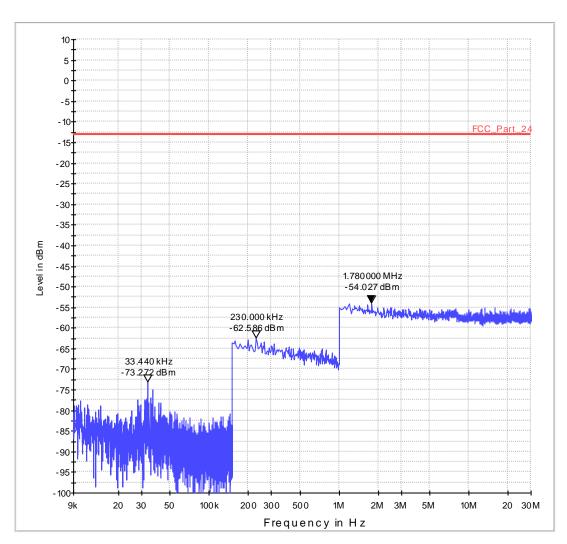




Diagram No.: 36.61_Ch9262_RMC_Sweep2

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 24 / RSS-133, Issue 6

SW-Version: EMC32 V8.53.0

Operation mode: TX - FDD B2 (RMC), Channel 9262

Channel Bandwidth -Operator MFr
Comment: --

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --

Fula2_FCC_24_FDD_Scan2_30MHz_19.5GHz

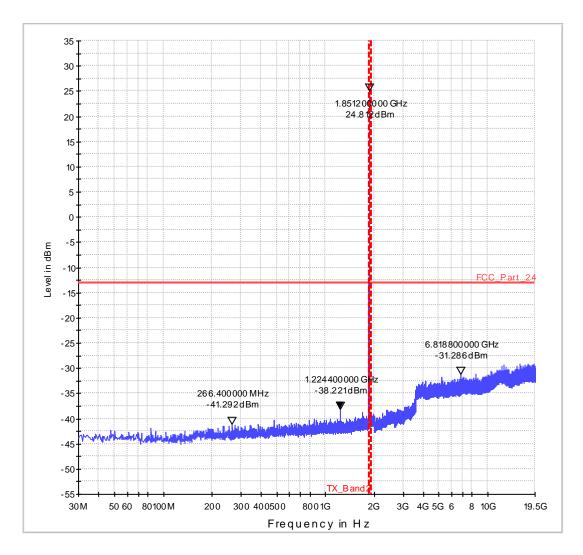




Diagram No.: 36.62_Ch9400_RMC_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 24 / RSS-133, Issue 6

SW-Version: EMC32 V8.53.0

Operation mode: TX - FDD B2 (RMC), Channel 9400

Channel Bandwidth -Operator MFr
Comment: --

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345



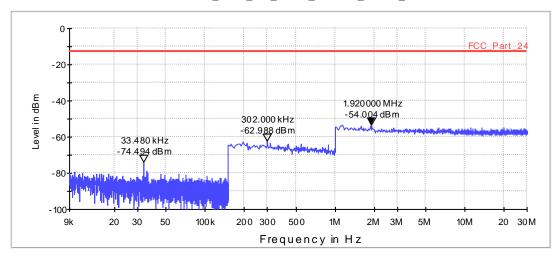




Diagram No.: 36.63_Ch9400_RMC_Sweep2

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 24 / RSS-133, Issue 6

SW-Version: EMC32 V8.53.0

Operation mode: TX - FDD B2 (RMC), Channel 9400

Operator MFr

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --

Fula2_FCC_24_FDD_Scan2_30MHz_19.5GHz

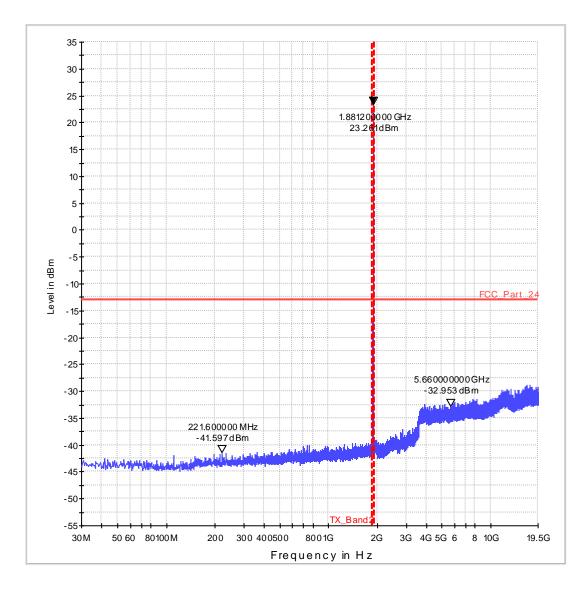




Diagram No.: 36.64_Ch9538_RMC_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 24 / RSS-133, Issue 6

SW-Version: EMC32 V8.53.0

Operation mode: TX - FDD B2 (RMC), Channel 9538

Operator MFr Comment: --

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

 $Fula2_FCC_24_FDD_Scan1_9kHz_30MHz$

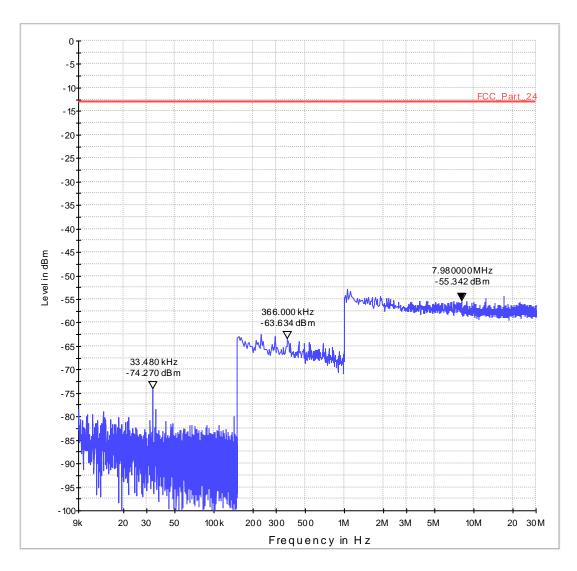




Diagram No.: 36.65_Ch9538_RMC_Sweep2

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 24 / RSS-133, Issue 6

SW-Version: EMC32 V8.53.0

Operation mode: TX - FDD B2 (RMC), Channel 9538

Channel Bandwidth -Operator MFr
Comment: --

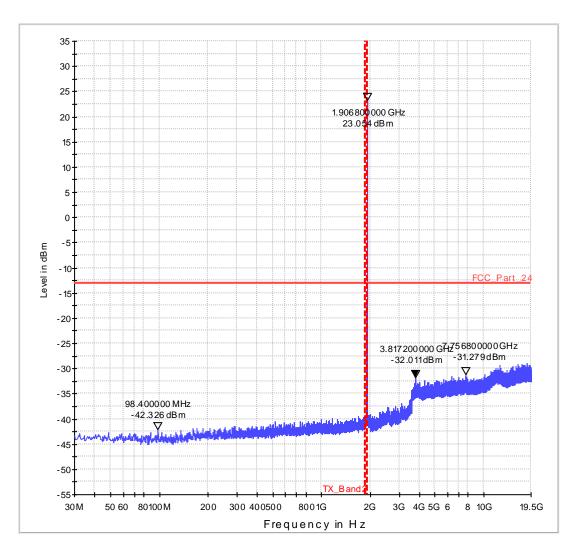
EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

Fula2_FCC_24_FDD_Scan2_30MHz_19.5GHz





1.11. Spurious emissions conducted on FDD Band IV

Diagram No.: 36.70_Ch1312_RMC_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 27 / RSS-139, Issue 2

SW-Version: EMC32 V8.53.0

Operation mode: TX - FDD B4 (RMC), Channel 1312

Channel Bandwidth -Operator MFr
Comment: --

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --

Fula2_FCC_27_Scan1_9kHz_30MHz

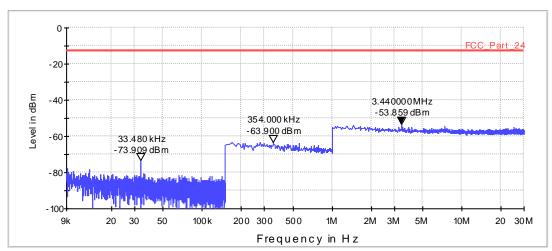




Diagram No.: 36.71_Ch1312_RMC_Sweep2

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 27 / RSS-139, Issue 2

SW-Version: EMC32 V8.53.0

Operation mode: TX - FDD B4 (RMC), Channel 1312

Channel Bandwidth --

Operator MFr Comment: --

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --

Fula2_FCC_27_Scan2_30MHz_18GHz

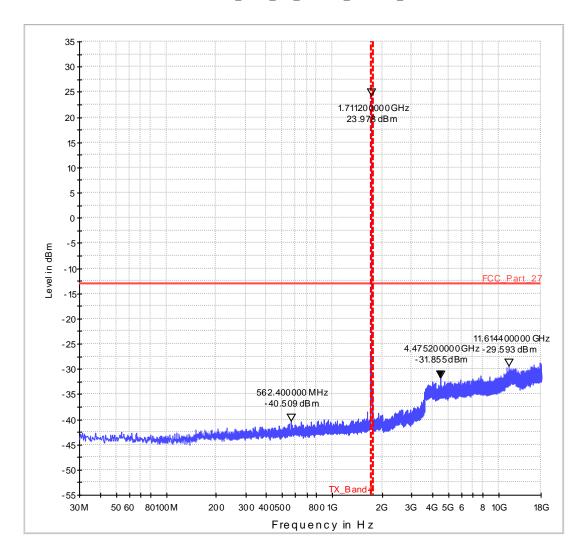




Diagram No.: 36.72_Ch1450_RMC_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 27 / RSS-139, Issue 2

SW-Version: EMC32 V8.53.0

Operation mode: TX - FDD B4 (RMC), Channel 1450

Operator MFr

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --

Fula2_FCC_27_Scan1_9kHz_30MHz

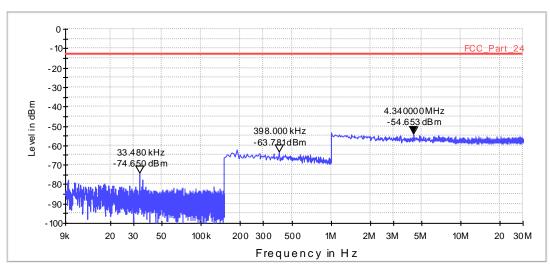




Diagram No.: 36.73_Ch1450_RMC_Sweep2

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 27 / RSS-139, Issue 2

SW-Version: EMC32 V8.53.0

Operation mode: TX - FDD B4 (RMC), Channel 1450

Channel Bandwidth --

Operator MFr Comment: --

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --

Fula2_FCC_27_Scan2_30MHz_18GHz

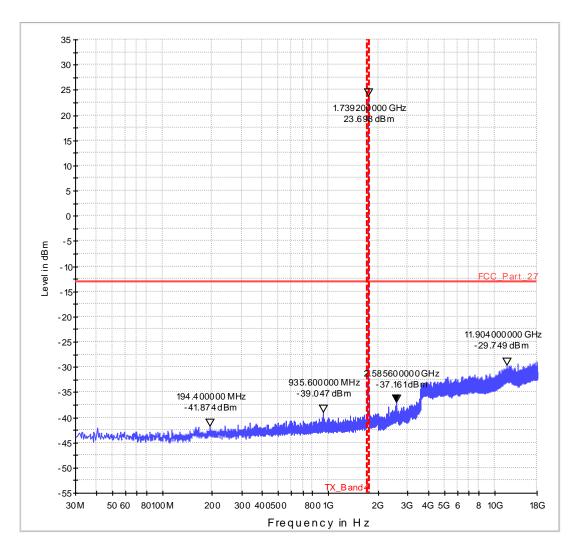




Diagram No.: 36.74_Ch1513_RMC_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 27 / RSS-139, Issue 2

SW-Version: EMC32 V8.53.0

Operation mode: TX - FDD B4 (RMC), Channel 1513

Channel Bandwidth -Operator MFr
Comment: --

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

Fula2_FCC_27_Scan1_9kHz_30MHz

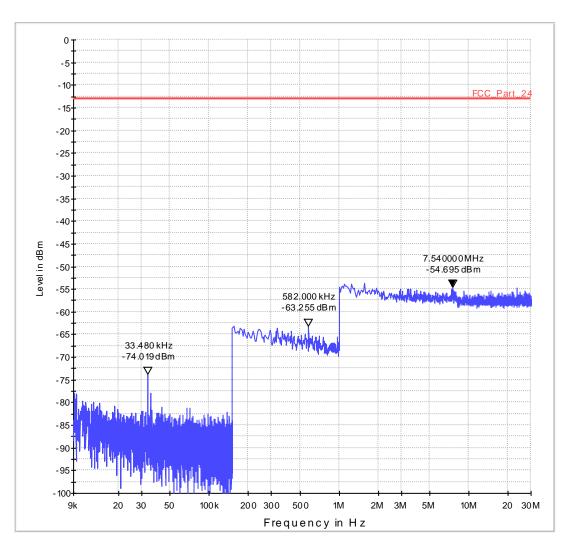




Diagram No.: 36.75_Ch1513_RMC_Sweep2

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 27 / RSS-139, Issue 2

SW-Version: EMC32 V8.53.0

Operation mode: TX - FDD B4 (RMC), Channel 1513

Channel Bandwidth -Operator MFr
Comment: --

EUT Information

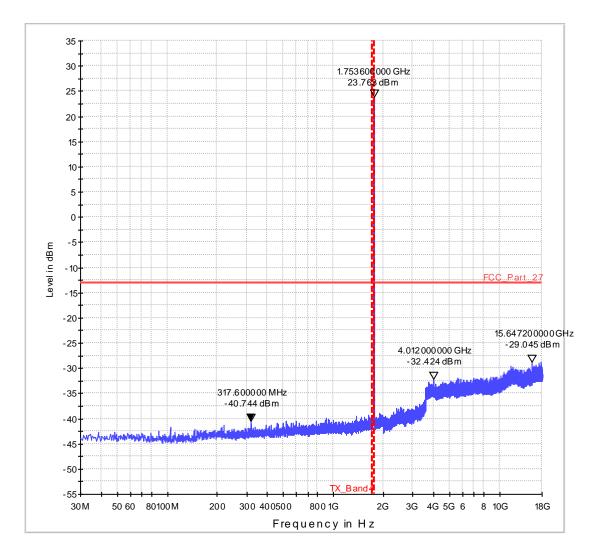
EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

Hardware Rev: 2.3
Software Rev: 02.502
Comment: --

Fula2_FCC_27_Scan2_30MHz_18GHz





1.12. Spurious emissions conducted on FDD Band V

Diagram No.: 36.40_Ch4132_RMC_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 22 / RSS-132, Issue 3

SW-Version: EMC32 V8.53.0

Operation mode: TX - UMTS B5 (RMC), Channel 4132

Channel Bandwidth -Operator mfr
Comment: --

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

Fula2_FCC_22_Scan1_9kHz_30MHz

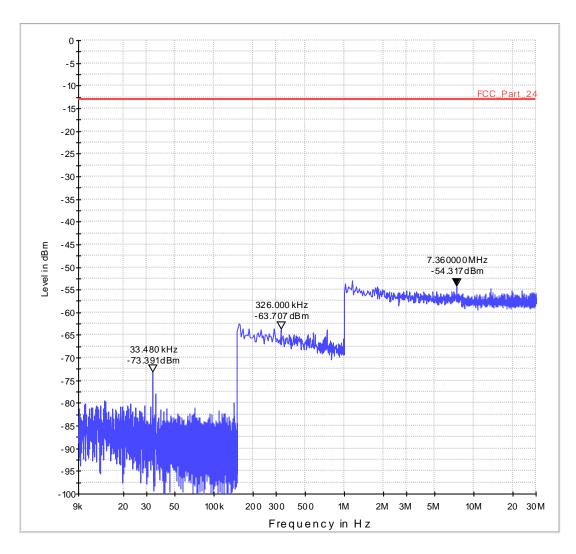




Diagram No.: 36.41_Ch4132_RMC_Sweep2

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 22 / RSS-132, Issue 3

SW-Version: EMC32 V8.53.0

Operation mode: TX - FDD B5 (RMC), Channel 4132

Channel Bandwidth -Operator MFr
Comment: --

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

Fula2_FCC_22_Scan2_30MHz_9GHz

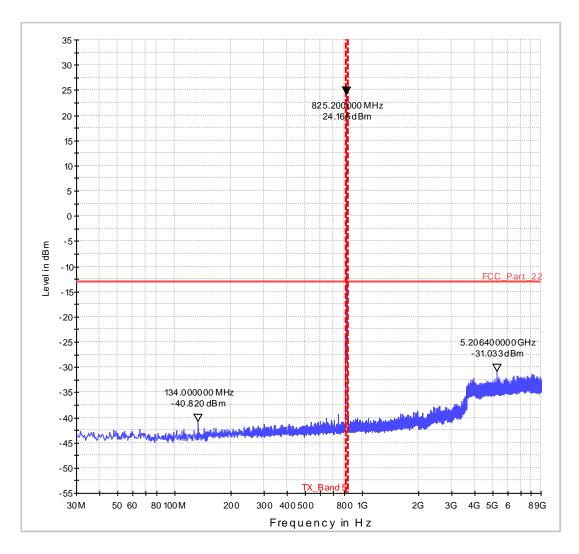




Diagram No.: 36.42_Ch4183_RMC_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 22 / RSS-132, Issue 3

SW-Version: EMC32 V8.53.0

Operation mode: TX - UMTS B5 (RMC), Channel 4183

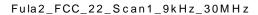
Channel Bandwidth -Operator mfr
Comment: --

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345



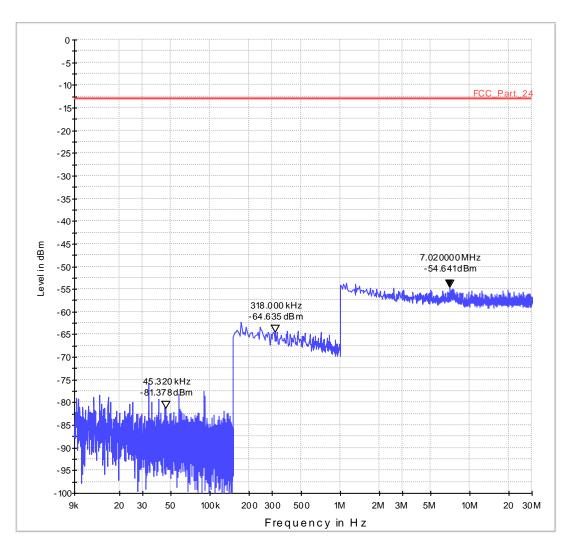




Diagram No.: 36.43_Ch4183_RMC_Sweep2

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 22 / RSS-132, Issue 3

SW-Version: EMC32 V8.53.0

Operation mode: TX - UMTS B5 (RMC), Channel 4183

Channel Bandwidth -Operator MFr
Comment: --

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

Fula2_FCC_22_Scan2_30MHz_9GHz

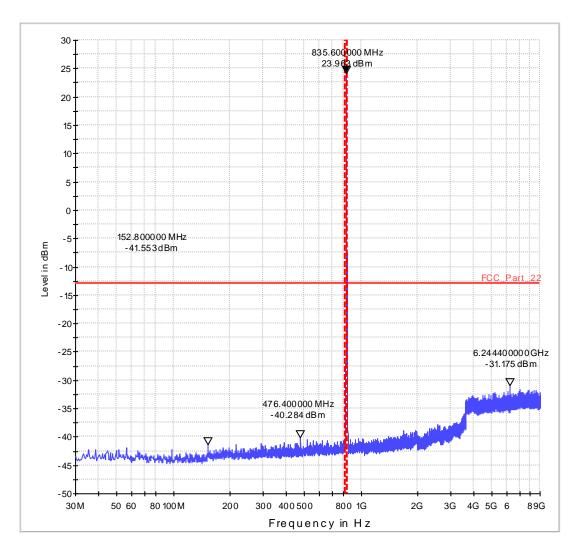




Diagram No.: 36.44_Ch4233_RMC_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 22 / RSS-132, Issue 3

SW-Version: EMC32 V8.53.0

Operation mode: TX - UMTS B5 (RMC), Channel 4233

Operator MFr

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

Fula2_FCC_22_Scan1_9kHz_30MHz

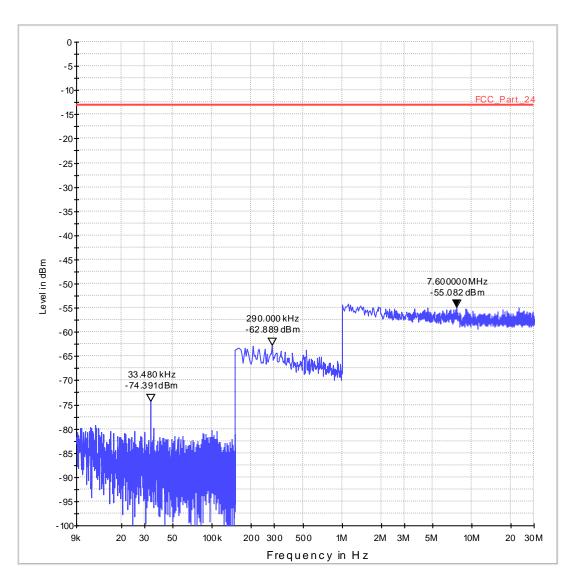




Diagram No.: 36.45_Ch4233_RMC_Sweep2

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 22 / RSS-132, Issue 3

SW-Version: EMC32 V8.53.0

Operation mode: TX - UMTS B5 (RMC), Channel 4233

Channel Bandwidth -Operator MFr
Comment: --

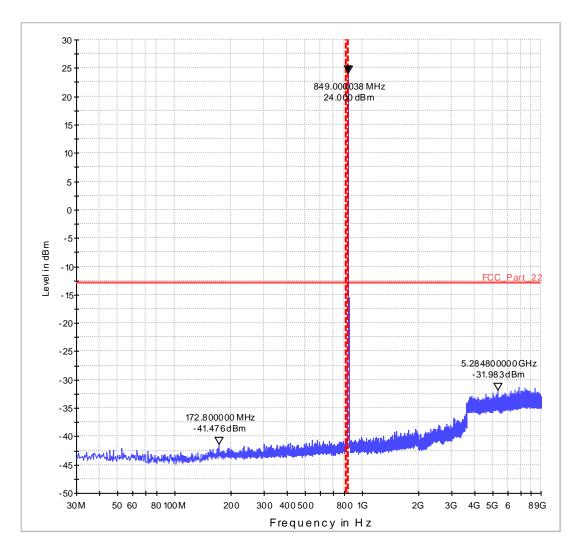
EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

Fula2_FCC_22_Scan2_30MHz_9GHz





1.13. Conducted emissions on FDD Band II band-edge

Diagram No.: 37.60_BE_Ch9262_RMC_PK

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 24 / RSS-133, Issue 6

SW-Version: EMC32 V8.53.0

Operation mode: TX - FDD B2 (RMC), Channel 9262

Channel Bandwidth -Operator Lor
Comment: --

Fula2_FCC_24_BE_LOW_9262

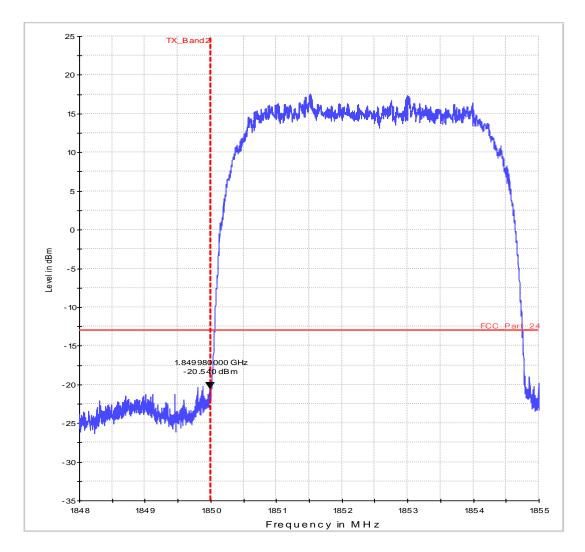




Diagram No.: 37.61_BE_Ch9538_RMC_PK

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

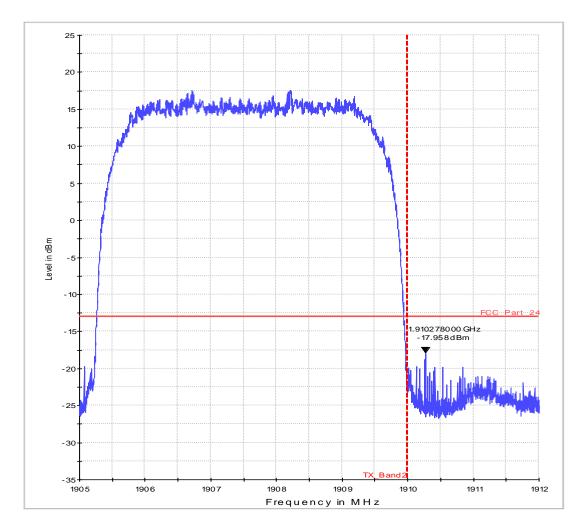
Test Standard: FCC Part 24 / RSS-133, Issue 6

SW-Version: EMC32 V8.53.0

Operation mode: TX - FDD B2 (RMC), Channel 9538

Channel Bandwidth -Operator Lor
Comment: --

Fula2_FCC_24_BE_High_9538





1.14. Conducted emissions on FDD Band IV band-edge

Diagram No.: 37.70_BE_Ch1312_RMC_PK

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 27 / RSS-139, Issue 2

SW-Version: EMC32 V8.53.0

Operation mode: TX - FDD B4 (RMC), Channel 1312

Channel Bandwidth -Operator Lor
Comment: --

Fula2_FCC_27_BE_Low_1312

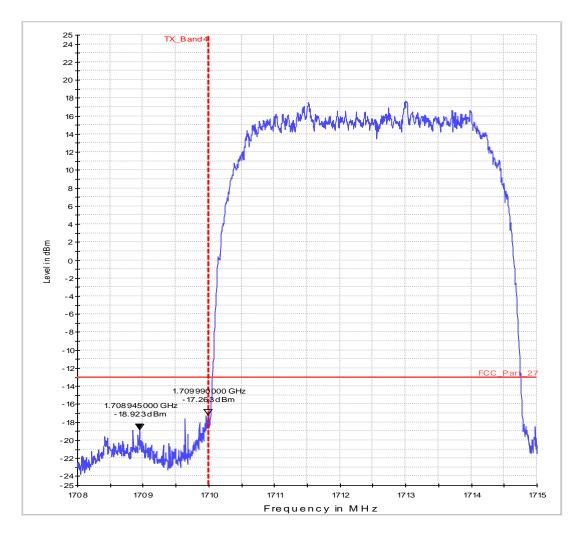




Diagram No.: 37.71_BE_Ch1513_RMC_PK

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

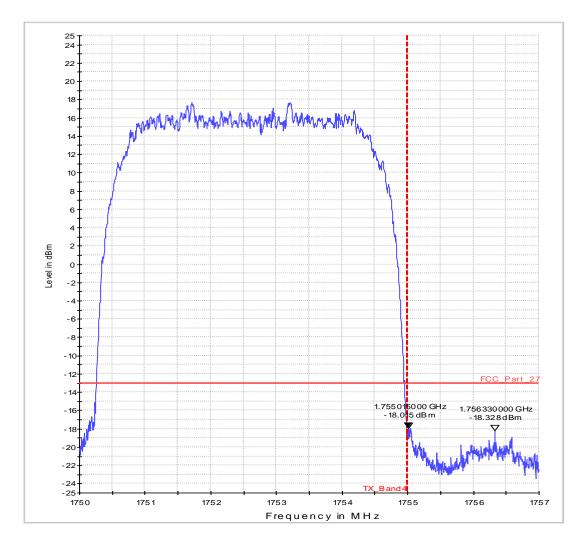
Test Standard: FCC Part 27 / RSS-139, Issue 2

SW-Version: EMC32 V8.53.0

Operation mode: TX - FDD B4 (RMC), Channel 1513

Channel Bandwidth -Operator Lor
Comment: --

Fula2_FCC_24_BE_High_1513





1.15. Conducted emissions on FDD Band V band-edge

Diagram No.: 37.40_BE_Ch4132_RMC_PK

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

Test Standard: FCC Part 22 / RSS-132, Issue 3

SW-Version: EMC32 V8.53.0

Operation mode: TX - UMTS B5 (RMC), Channel 4132

Channel Bandwidth -Operator Lor
Comment: --

Fula2_FCC_22_BE_LOW_4132

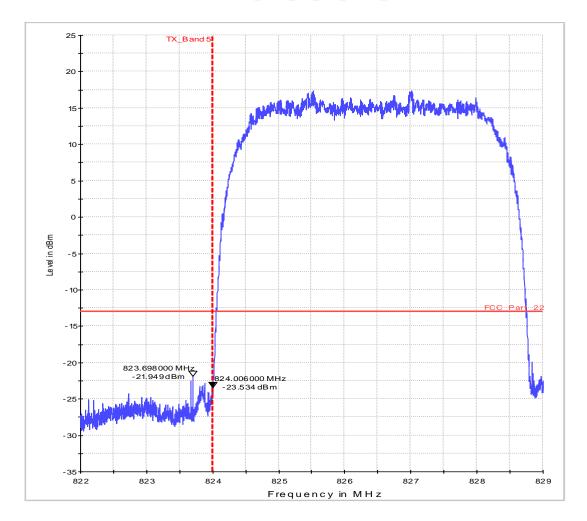




Diagram No.: 37.41_BE_Ch4233_RMC_PK

Common Information

Test Description: TX Spurious Emission Conducted §2.1051

Test Site: Radio laboratory 2

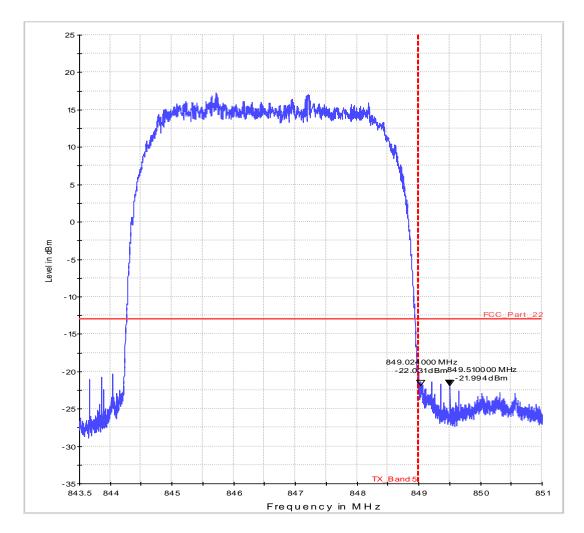
Test Standard: FCC Part 22 / RSS-132, Issue 3

SW-Version: EMC32 V8.53.0

Operation mode: TX - UMTS B5 (RMC), Channel 4233

Channel Bandwidth -Operator Lor
Comment: --

Fula2_FCC_22_BE_High_4233





1.16. Magnetic field strength measurements (f<30MHz) accord. Part 15, Subpart C 1.16.1. FDD Band 2

Diagram No. 2.16_Ch9262_FDDII

Date: 22.03.2015 Page 1 of 1

Test description: Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance

Version of Testsoftware: EMC32 V8.51.0

Distance correction: used accord. table, pls. see test report

Technical Data: Please see page 2 for detailed data of measurement setup

Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation

Used filter: bypass

Test specification: FCC 15.205 § 15.209 / RSS-Gen: Issue 4

Operator: Lo

Operating conditions: WCDMA FDD II RMC TX, ch 9262

Power during tests: 12V DC

Comment 1: Comment 2:

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345 Hardware Rev: 2.3

Software Rev: 02.502 Comment: --

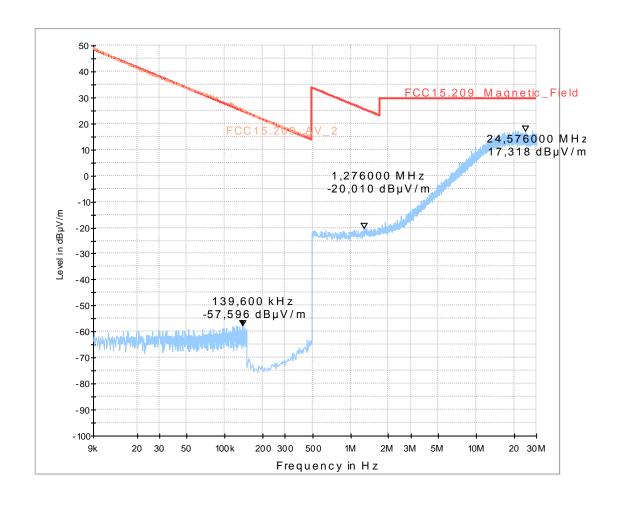




Diagram No. 2.17_Ch9400_FDDII

Date: 22.03.2015 Page 1 of 1

Test description: Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance

Version of Testsoftware: EMC32 V8.51.0

Distance correction: used accord. table, pls. see test report

Technical Data: Please see page 2 for detailed data of measurement setup Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation

Used filter: bypass

Test specification: FCC 15.205 § 15.209 / RSS-Gen: Issue 4

Operator: L

Operating conditions: WCDMA FDD II RMC TX, ch 9400

Power during tests: 12V DC

Comment 1: Comment 2:

EUT Information

EUT Name: WMC0534PX8 (d) Manufacturer: Gemalto

Serial Number: #0044010814211345

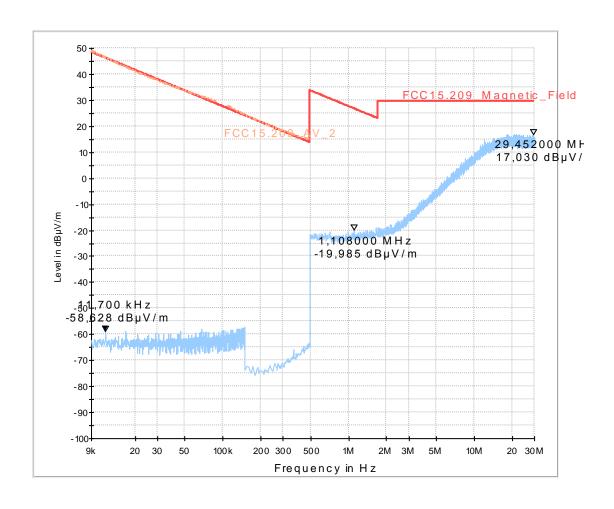




Diagram No. 2.18_Ch9538_FDDII

Date: 22.03.2015 Page 1 of 1

Test description: Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance

Version of Testsoftware: EMC32 V8.51.0

Distance correction: used accord. table, pls. see test report

Technical Data: Please see page 2 for detailed data of measurement setup Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation

Used filter: bypass

Test specification: FCC 15.205 § 15.209 / RSS-Gen: Issue 4

Operator: L

Operating conditions: WCDMA FDD II RMC TX, ch 9538

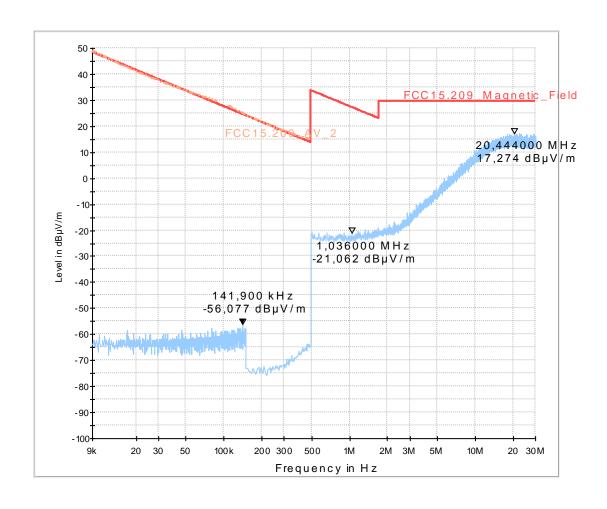
Power during tests: 12V DC

Comment 1: Comment 2:

EUT Information

EUT Name: WMC0534PX8 (d)
Manufacturer: Gemalto

Serial Number: #0044010814211345





1.16.2. FDD Band 4

Diagram No. 2.10_Ch1312_FDD4

Date: 21.03.2015 Page 1 of 1

Test description: Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance

Version of Testsoftware: EMC32 V8.51.0

Distance correction: used accord. table, pls. see test report

Technical Data: Please see page 2 for detailed data of measurement setup Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation

Used filter: bypass

Test specification: FCC 15.205 § 15.209 / RSS-Gen: Issue 4

Operator: Lo

Operating conditions: WCDMA FDD IV RMC, ch 1312

Power during tests: 12V DC on DSB75

Comment 1:

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

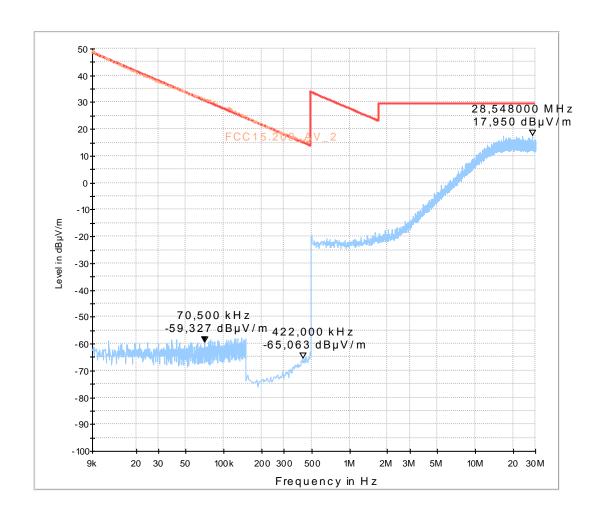




Diagram No. 2.11_Ch1450_FDD4

Page 1 of 1 Date: 21.03.2015

Test description: Magnetic Field Strength Measurement related to 30/300 m distance Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance

Version of Testsoftware: EMC32 V8.51.0

used accord. table, pls. see test report Distance correction:

Technical Data: Please see page 2 for detailed data of measurement setup

Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation

Used filter:

Test specification: FCC 15.205 § 15.209 / RSS-Gen: Issue 4

Operator:

Operating conditions: WCDMA FDD IV RMC, ch 1450

Power during tests: 12V DC on DSB75 Comment 1:

EUT Information

EUT Name: WMC0534PX8 (d)

Manufacturer: Gemalto

Serial Number: #0044010814211345

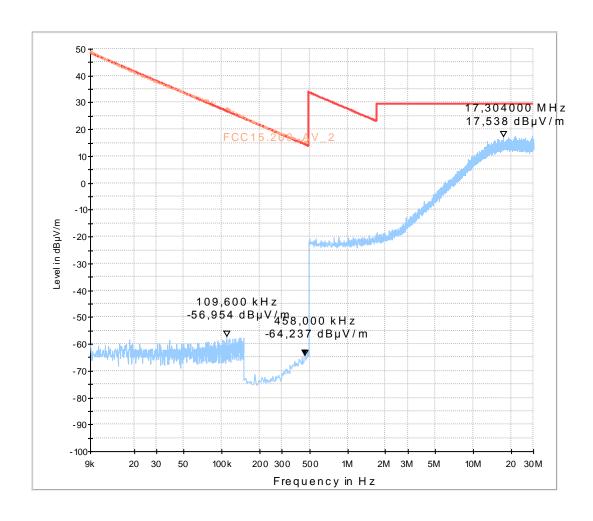




Diagram No. 2.12_Ch1513_FDD4

Date: 21.03.2015 Page 1 of 1

Test description: Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance

Version of Testsoftware: EMC32 V8.51.0

Distance correction: used accord. table, pls. see test report

Technical Data: Please see page 2 for detailed data of measurement setup

Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation

Used filter: bypas

Test specification: FCC 15.205 § 15.209 / RSS-Gen., Issue 4

Operator: Lo

Operating conditions: WCDMA FDD IV RMC, ch 1513

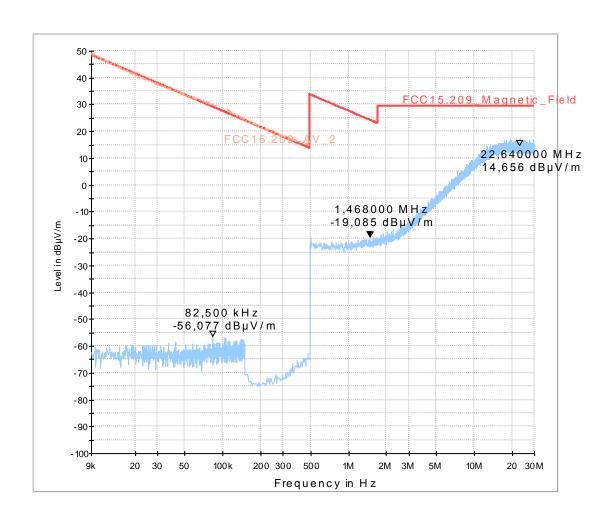
Power during tests: 12V DC

Comment 1:

EUT Information

EUT Name: WMC0534PX8 (d)
Manufacturer: Gemalto

Serial Number: #0044010814211345





1.16.3. FDD Band 5

Diagram No. 2.13_Ch4132_FDDV

Date: 21.03.2015 Page 1 of 1

Test description: Magnetic Field Strength Measurement related to 30/300 m distance Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance

Version of Testsoftware: EMC32 V8.51.0

Distance correction: used accord. table, pls. see test report

Technical Data: Please see page 2 for detailed data of measurement setup Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation

Used filter:

Test specification: FCC 15.205 § 15.209 / RSS-Gen., Issue 4

Operator:

Operating conditions: WCDMA FDD V RMC TX, ch 4132

Power during tests: 12V DC

Comment 1:

EUT Information

EUT Name: WMC0534PX8 (d) Manufacturer:

Gemalto

#0044010814211345 Serial Number:

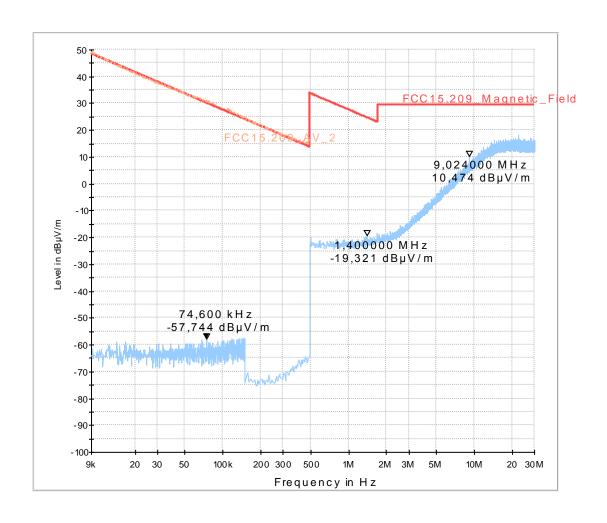




Diagram No. 2.14_Ch4183_FDDV

Page 1 of 1 Date: 21.03.2015

Test description: Magnetic Field Strength Measurement related to 30/300 m distance Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance

Version of Testsoftware: EMC32 V8.51.0

Distance correction: used accord. table, pls. see test report

Technical Data: Please see page 2 for detailed data of measurement setup

Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation

Used filter:

Test specification: FCC 15.205 § 15.209 / RSS-Gen., Issue 4

Operator:

Operating conditions: WCDMA FDD V RMC TX, ch 4183

Power during tests: 12V DC

Comment 1:

EUT Information

WMC0534PX8 (d) FUT Name: Manufacturer: Gemalto

Serial Number: #0044010814211345

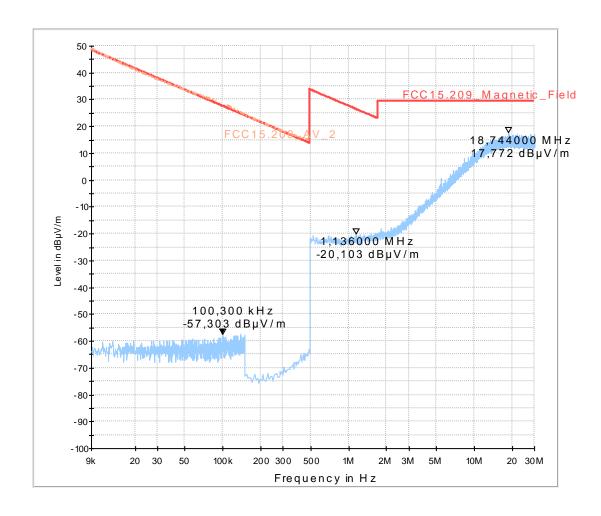




Diagram No. 2.15_Ch4233_FDDV

Date: 21.03.2015 Page 1 of 1

Test description: Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance

Version of Testsoftware: EMC32 V8.51.0

Distance correction: used accord. table, pls. see test report

Technical Data: Please see page 2 for detailed data of measurement setup

Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation

Used filter: bypas

Test specification: FCC 15.205 § 15.209 / RSS-Gen., Issue 4

Operator: Lo

Operating conditions: WCDMA FDD V RMC TX, ch 4233

Power during tests: 12V DC

Comment 1:

EUT Information

EUT Name: WMC0534PX8 (d)
Manufacturer: Gemalto

Serial Number: #0044010814211345

