

Annex 4: Measurement diagrams to  
**TEST REPORT**  
No.: 6-0592-14-2-9a







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

for

**ASCOM AB**

Cellular/Wi-Fi Smartphone  
SH1-ACAA

**FCC ID: BXZSH1C**

Laboratory Accreditation and Listings			
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## 1. Measurement diagrams

### 1.1. Emissions AC-Power lines conducted

#### 1.03

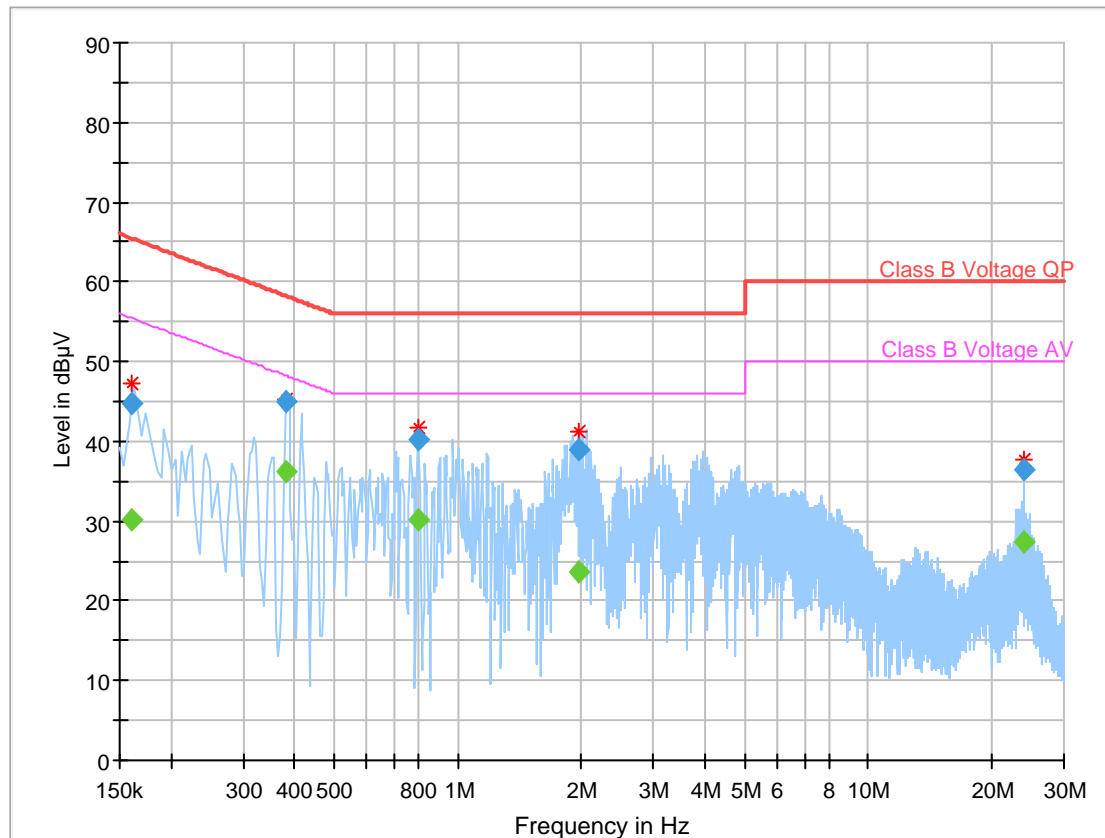
##### Common Information

Test Description:	Conducted Voltage Measurement Class B
Test Site & Location:	Conducted Emission, CETECOM GmbH Essen
Test Software:	R&S EMC32 v9.15
Test Specification:	FCC 15.107, FCC 15.207
Operating Mode:	EGPRS 850 TCH + GPS
Measured on line:	N/L1
Diagram details:	Shows the peak values as a sum of measured ports in maxhold mode
Environmental Conditions:	Humidity: 28%rH; Temperature: 21,4°C
Operator:	HLa
Comments:	

##### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EA0D
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



**Final Result**

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)
0.160000	44.76	---	65.46
0.160000	---	30.25	55.46
0.381875	---	36.21	48.24
0.381875	44.96	---	58.24
0.800938	40.20	---	56.00
0.800938	---	30.11	46.00
1.980625	38.88	---	56.00
1.980625	---	23.69	46.00
24.000156	36.46	---	60.00
24.000156	---	27.44	50.00

**Final Result**

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)
0.160000	44.76	---	65.46
0.160000	---	30.25	55.46
0.381875	---	36.21	48.24
0.381875	44.96	---	58.24
0.800938	40.20	---	56.00
0.800938	---	30.11	46.00
1.980625	38.88	---	56.00
1.980625	---	23.69	46.00
24.000156	36.46	---	60.00
24.000156	---	27.44	50.00

## 1.01

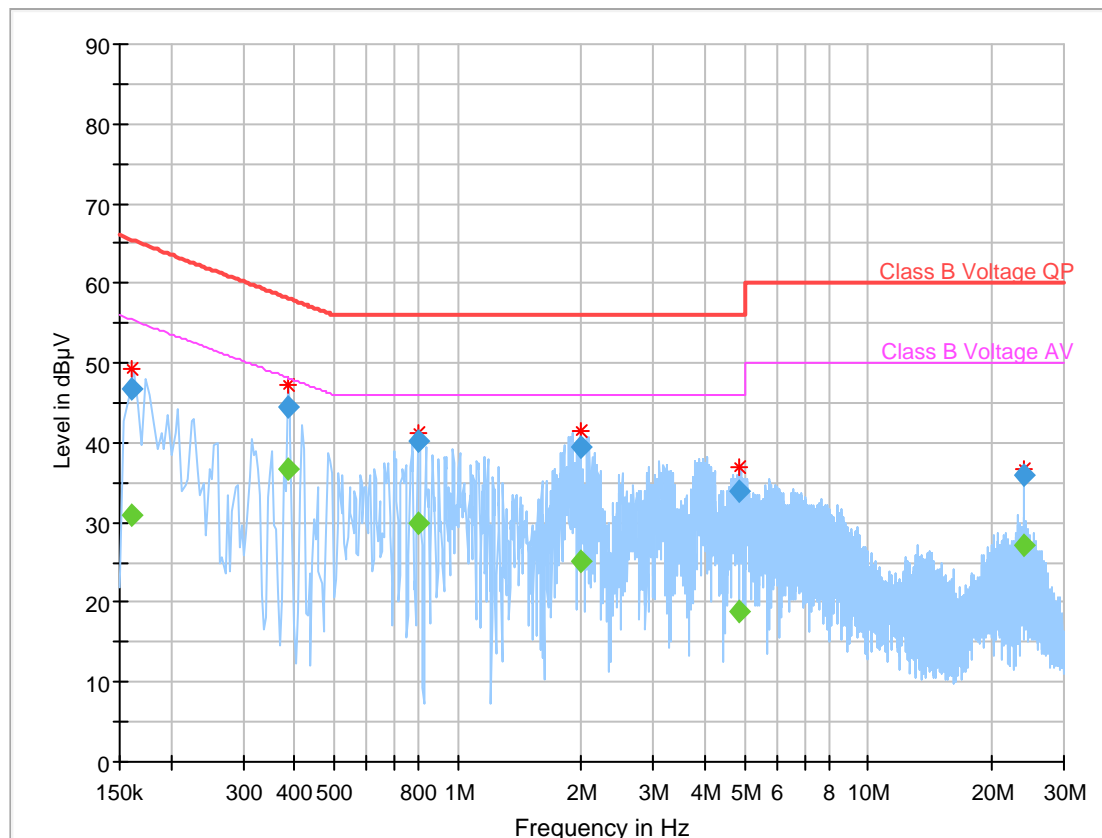
### Common Information

Test Description:	Conducted Voltage Measurement Class B
Test Site & Location:	Conducted Emission, CETECOM GmbH Essen
Test Software:	R&S EMC32 v9.15
Test Specification:	FCC 15.107, FCC 15.207
Operating Mode:	UMTS FDDV TCH + GPS
Measured on line:	N/L1
Diagram details:	Shows the peak values as a sum of measured ports in maxhold mode
Environmental Conditions:	Humidity: 28%rH; Temperature: 21,4°C
Operator:	HLa
Comments:	

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	-----
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EA0D
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



**Final Result**

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)
0.160000	---	31.01	55.46
0.160000	46.73	---	65.46
0.386875	44.50	---	58.13
0.386875	---	36.60	48.13
0.800938	40.22	---	56.00
0.800938	---	29.97	46.00
1.986250	39.37	---	56.00
1.986250	---	25.24	46.00
4.846719	33.98	---	56.00
4.846719	---	18.73	46.00
24.000156	---	27.04	50.00
24.000156	35.92	---	60.00

**Final Result**

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)
0.160000	---	31.01	55.46
0.160000	46.73	---	65.46
0.386875	44.50	---	58.13
0.386875	---	36.60	48.13
0.800938	40.22	---	56.00
0.800938	---	29.97	46.00
1.986250	39.37	---	56.00
1.986250	---	25.24	46.00
4.846719	33.98	---	56.00
4.846719	---	18.73	46.00
24.000156	---	27.04	50.00
24.000156	35.92	---	60.00

## 1.02

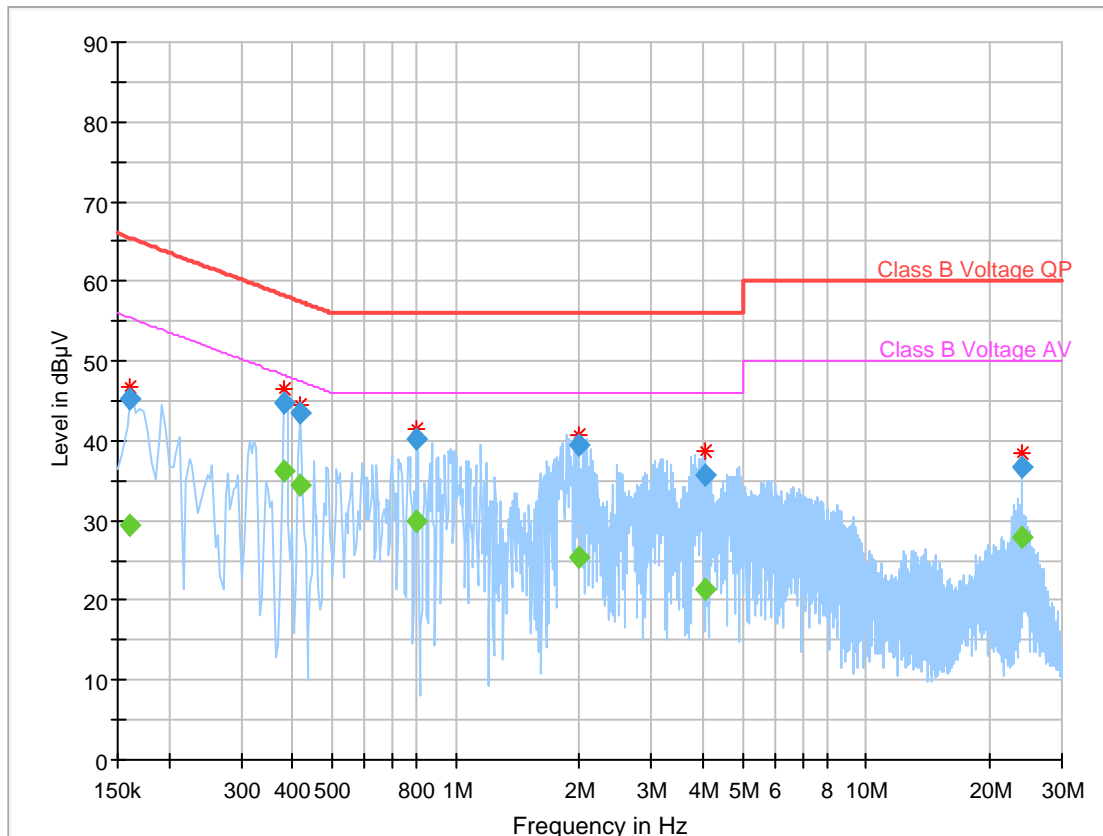
### Common Information

Test Description:	Conducted Voltage Measurement Class B
Test Site & Location:	Conducted Emission, CETECOM GmbH Essen
Test Software:	R&S EMC32 v9.15
Test Specification:	FCC 15.107, FCC 15.207
Operating Mode:	GPRS 1900 TCH + GPS
Measured on line:	N/L1
Diagram details:	Shows the peak values as a sum of measured ports in maxhold mode
Environmental Conditions:	Humidity: 28%rH; Temperature: 21,4°C
Operator:	HLa
Comments:	

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EA0D
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



**Final Result**

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)
0.160000	---	29.49	55.46
0.160000	45.25	---	65.46
0.381875	44.86	---	58.24
0.381875	---	36.13	48.24
0.417031	---	34.55	47.51
0.417031	43.59	---	57.51
0.799844	40.29	---	56.00
0.799844	---	29.98	46.00
1.984531	39.41	---	56.00
1.984531	---	25.36	46.00
4.043125	35.69	---	56.00
4.043125	---	21.26	46.00
24.000156	---	27.84	50.00
24.000156	36.58	---	60.00

**Final Result**

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)
0.160000	---	29.49	55.46
0.160000	45.25	---	65.46
0.381875	44.86	---	58.24
0.381875	---	36.13	48.24
0.417031	---	34.55	47.51
0.417031	43.59	---	57.51
0.799844	40.29	---	56.00
0.799844	---	29.98	46.00
1.984531	39.41	---	56.00
1.984531	---	25.36	46.00
4.043125	35.69	---	56.00
4.043125	---	21.26	46.00
24.000156	---	27.84	50.00
24.000156	36.58	---	60.00



## 1.2. Radiated field strength emissions below 30 MHz

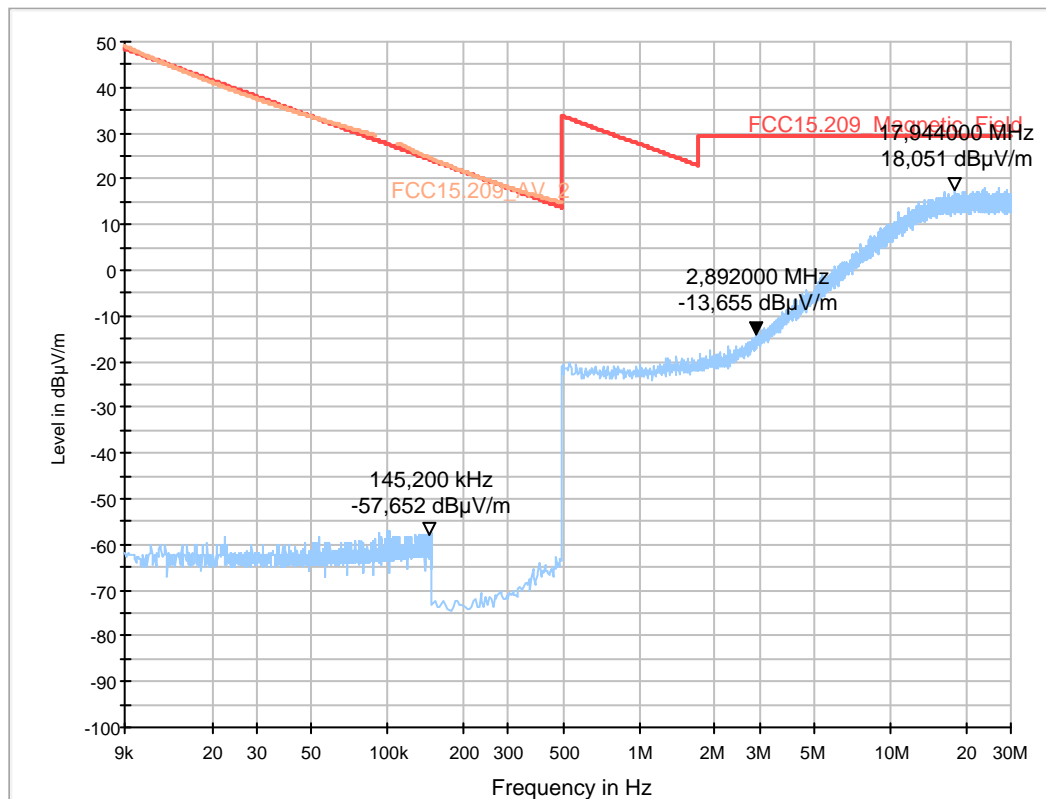
### Diagram No. 2.01\_Ch128\_EGPRS

Date:	13.02.2015	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 3	
Operator:	Kta	
Operating conditions:	GSM 850 TCH	
Power during tests:	120V/60Hz, full loaded batteries	
Comment 1:	Channel low	
Comment 2:		

#### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	-----
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EA0D
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC

FCC15.209\_magn hor+vert



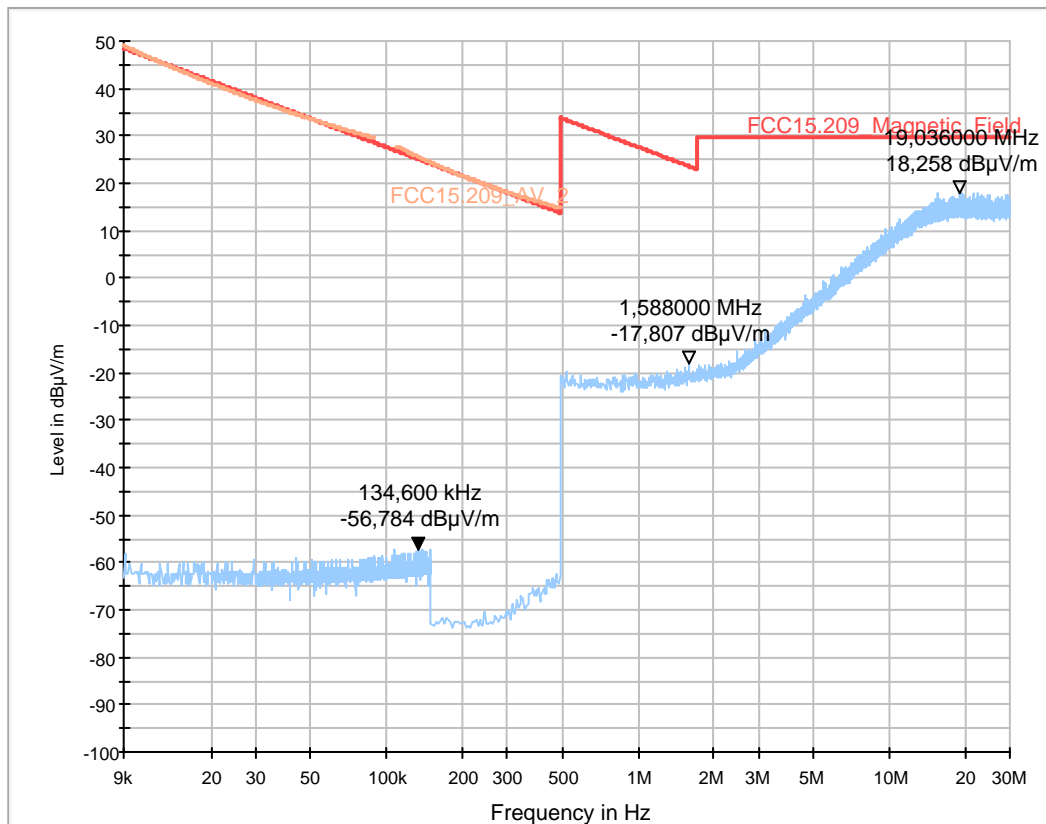
## Diagram No. 2.05\_Ch192\_EGPRS

Date:	13.02.2015	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 3	
Operator:	Kta	
Operating conditions:	GSM 850 TCH	
Power during tests:	110V/60Hz, full loaded batteries	
Comment 1:	Channel middle	

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EA0D
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC

FCC15.209\_magn hor+vert



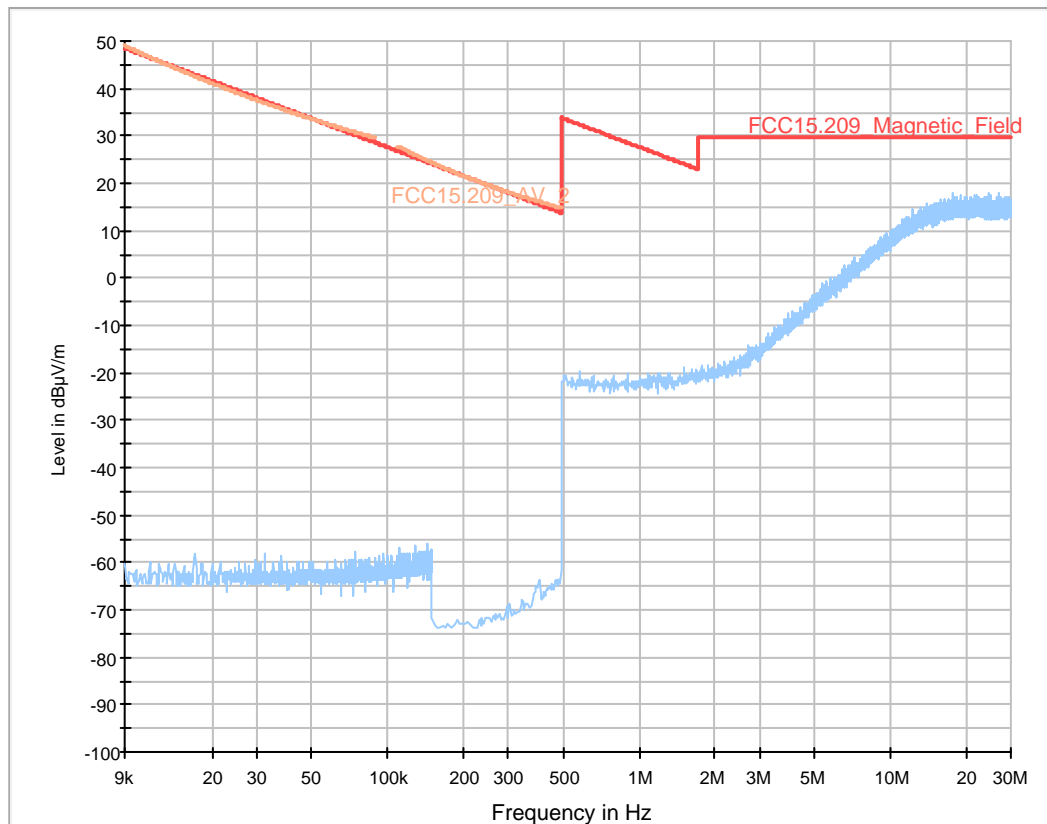
## Diagram No. 2.06\_Ch251\_EGPRS

Date:	13.02.2015	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 3	
Operator:	Kta	
Operating conditions:	GSM 850 TCH	
Power during tests:	110V/60Hz, full loaded batteries	
Comment 1:	Channel high	

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EA0D
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC

FCC15.209\_magn hor+vert



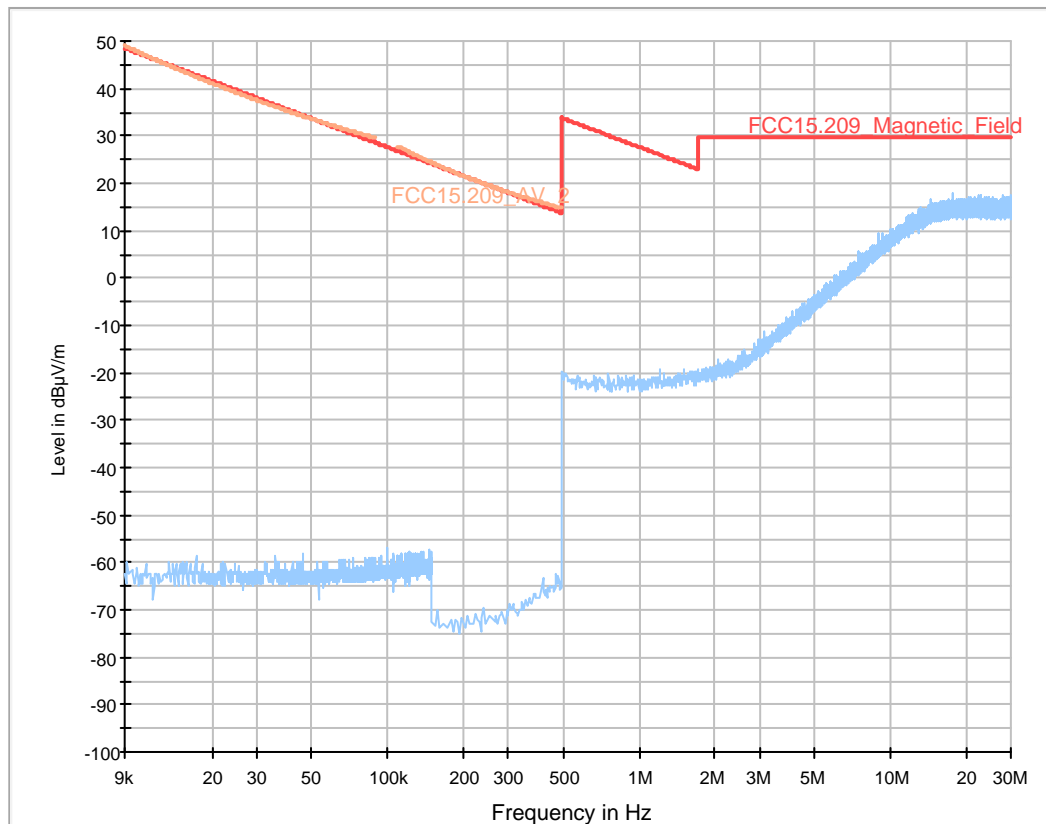
## Diagram No. 2.07\_Ch4133

Date:	13.02.2015	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 3	
Operator:	Kta	
Operating conditions:	FDDV, ch4133	
Power during tests:	110V/60Hz, full loaded batteries	
Comment 1:	Channel low	

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EA0D
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC

FCC15.209\_magn hor+vert



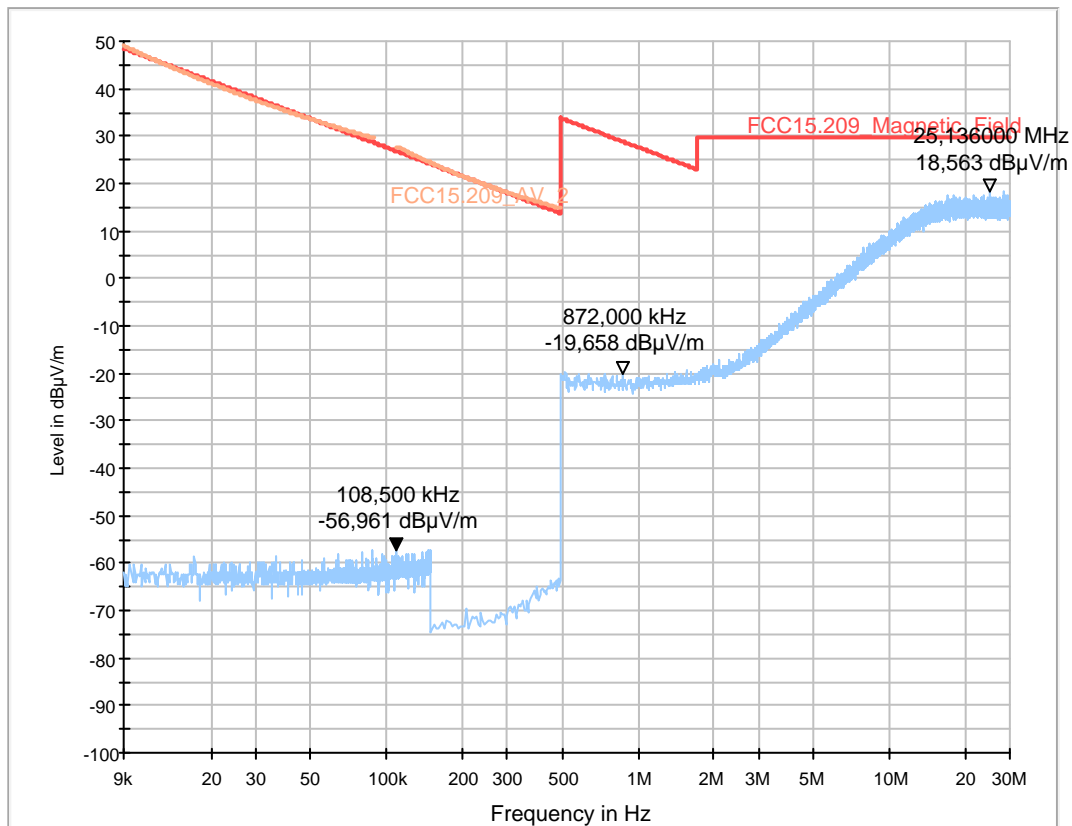
## Diagram No. 2.09\_Ch4185

Date:	13.02.2015	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 3	
Operator:	Kta	
Operating conditions:	FDDV, ch4185	
Power during tests:	110V/60Hz, full loaded batteries	
Comment 1:	Channel middle	

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EA0D
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC

FCC15.209\_magn hor+vert



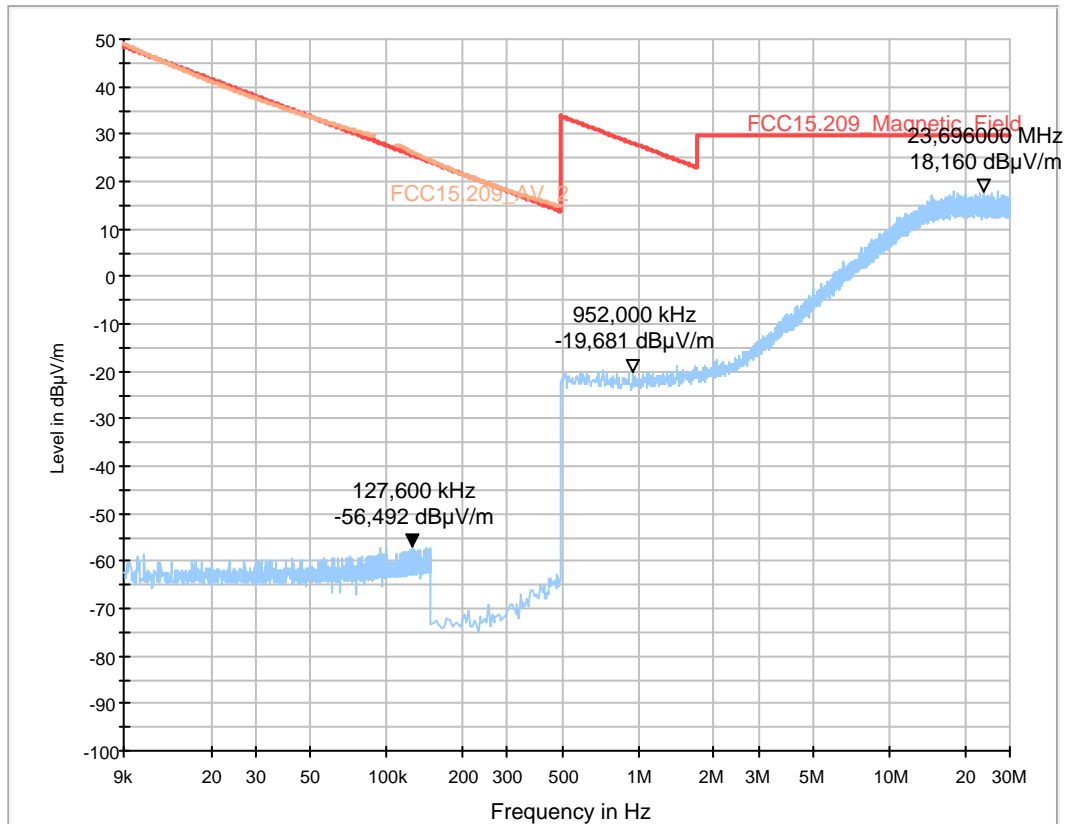
## Diagram No. 2.10\_Ch4232

Date:	13.02.2015	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 3	
Operator:	Kta	
Operating conditions:	FDDV, ch4232	
Power during tests:	110V/60Hz, full loaded batteries	
Comment 1:	Channel high	

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EA0D
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC

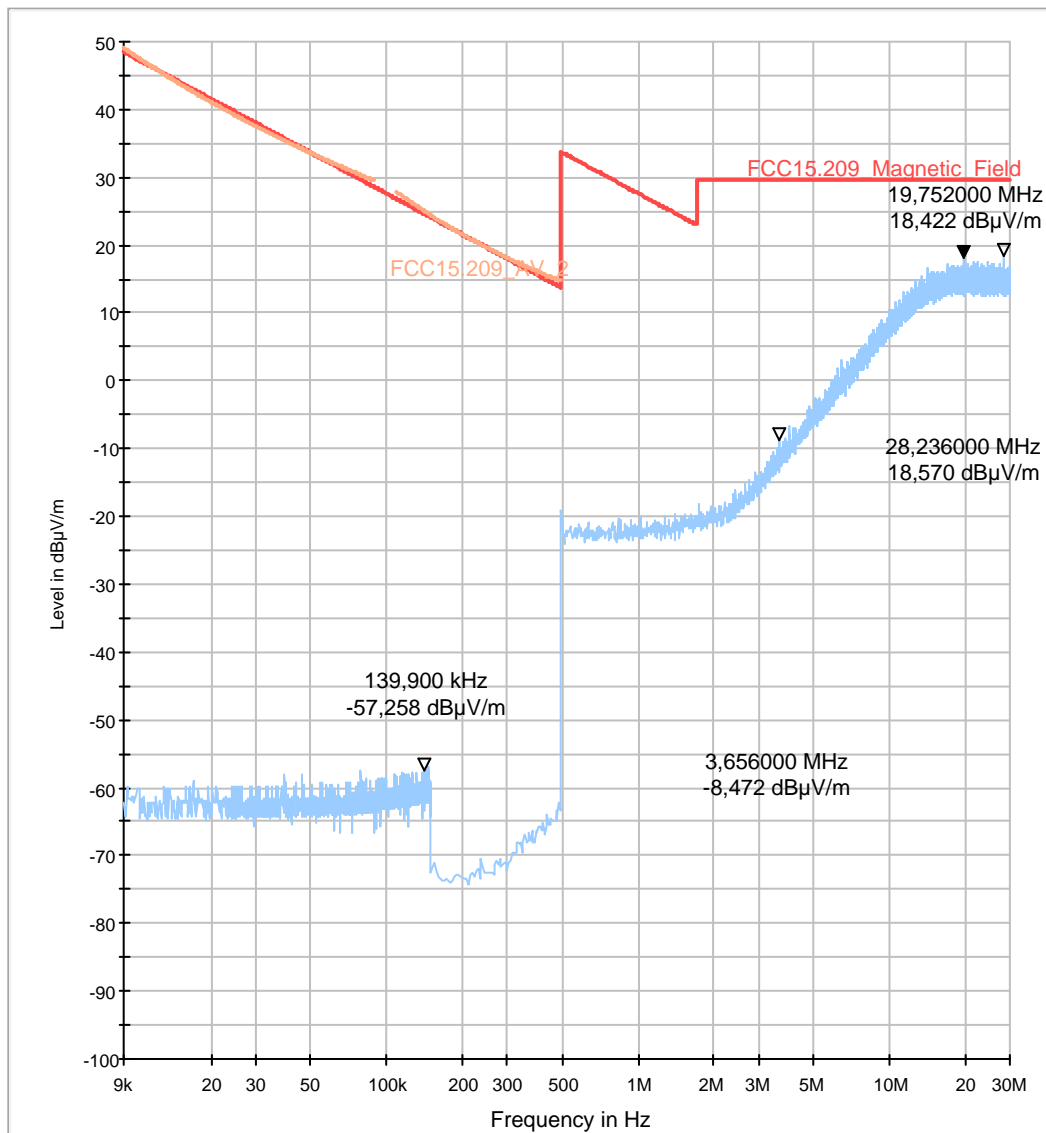
FCC15.209\_magn hor+vert



## Diagram No. 2.11\_Ch512

Date:	10.02.2015	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	
Operator:	Kre	
Operating conditions:	TCH1900 Voice	
Power during tests:	120V/60Hz	
Comment 1:	Channel low=512	

FCC15.209\_magn hor+vert



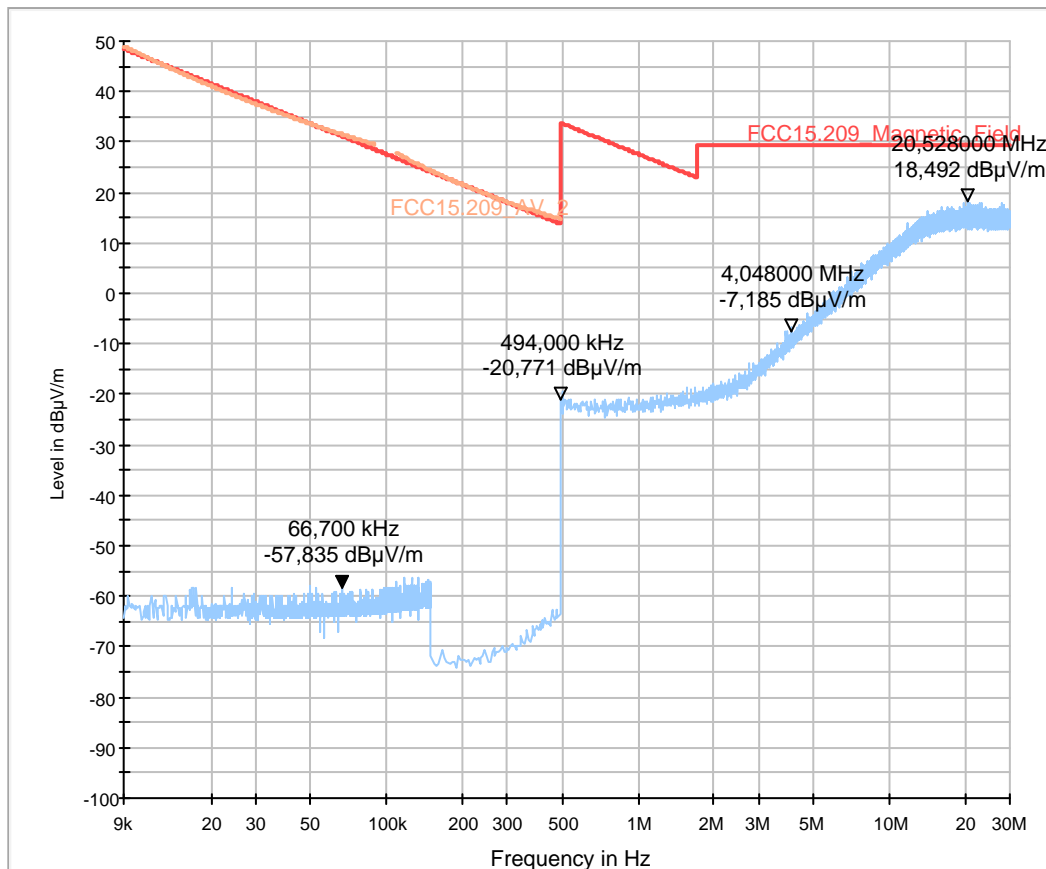
## Diagram No. 2.12\_Ch661

Test description:	Date: 10.02.2015 Page 1 of 1
Test site and distance:	Magnetic Field Strength Measurement related to 30/300 m distance
Version of Testsoftware:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Distance correction:	EMC32 V8.51.0
Technical Data:	used accord. table, pls. see test report
Rec. antenna (pre-scan):	Please see page 2 for detailed data of measurement setup
Used filter:	height 1.00 m, parallel and 90° to EUT polarisation
Test specification:	bypass
	FCC 15.205 § 15.209
Operator:	Kre
Operating conditions:	TCH1900 Voice
Power during tests:	120V/60Hz
Comment 1:	Channel mid=661

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC

FCC15.209\_magn hor+vert

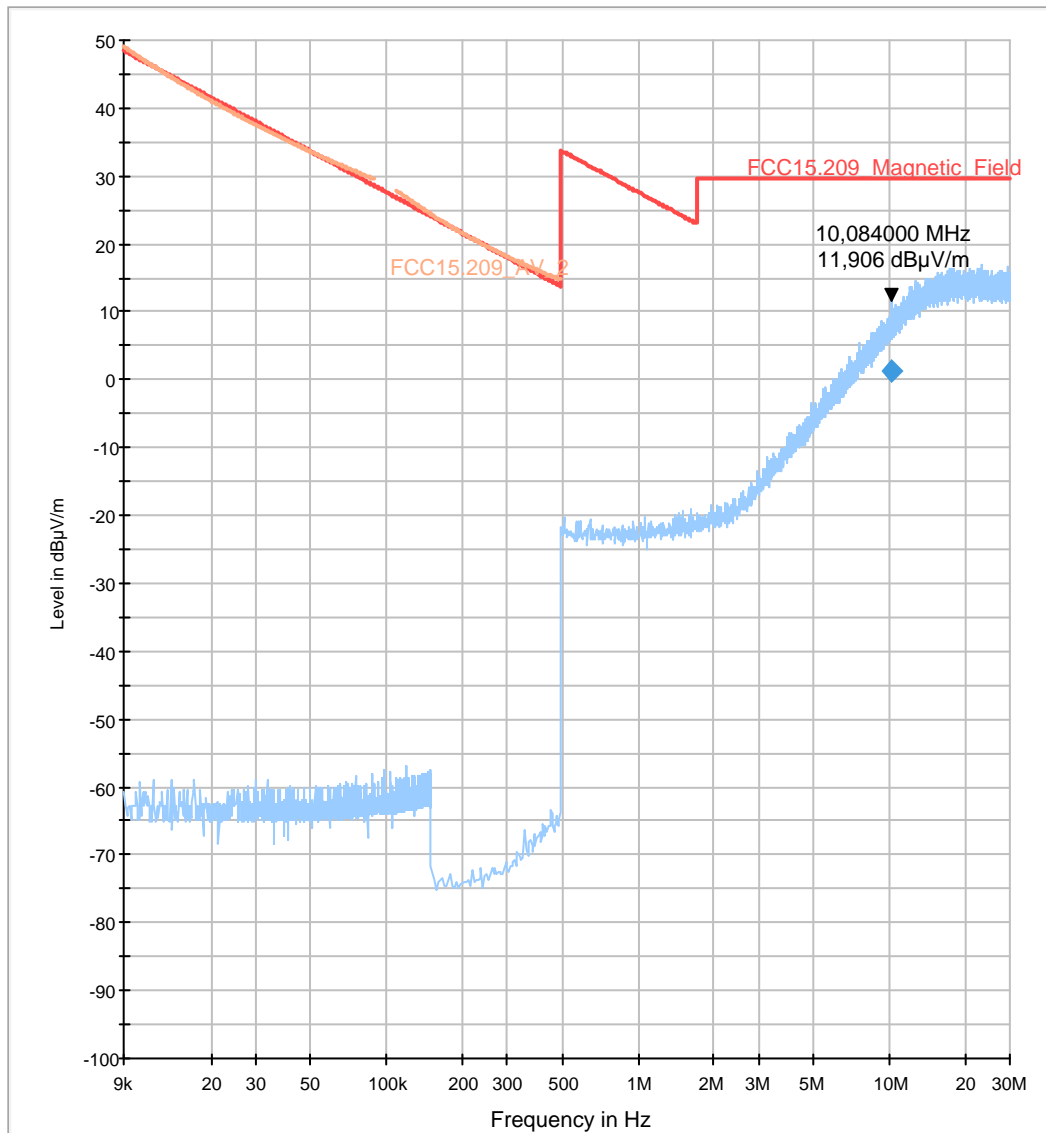




### Diagram No. 2.13\_Ch810

Date:	11.02.2015	Page 1 of 3
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:	Lor	
Operating conditions:	TCH1900 Voice	
Power during tests:	120V/60Hz	
Comment 1:	Channel high=810	

FCC15.209\_magn hor+vert



**Final Result 1**

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
10.084000	1.3	1000.0	10.000	V	27.0	-3.7	28.20	29.50

### 1.3. Radiated RF power (850 MHz transmitting mode)

#### Carrier\_Measurement\_GSM850\_nomVolt

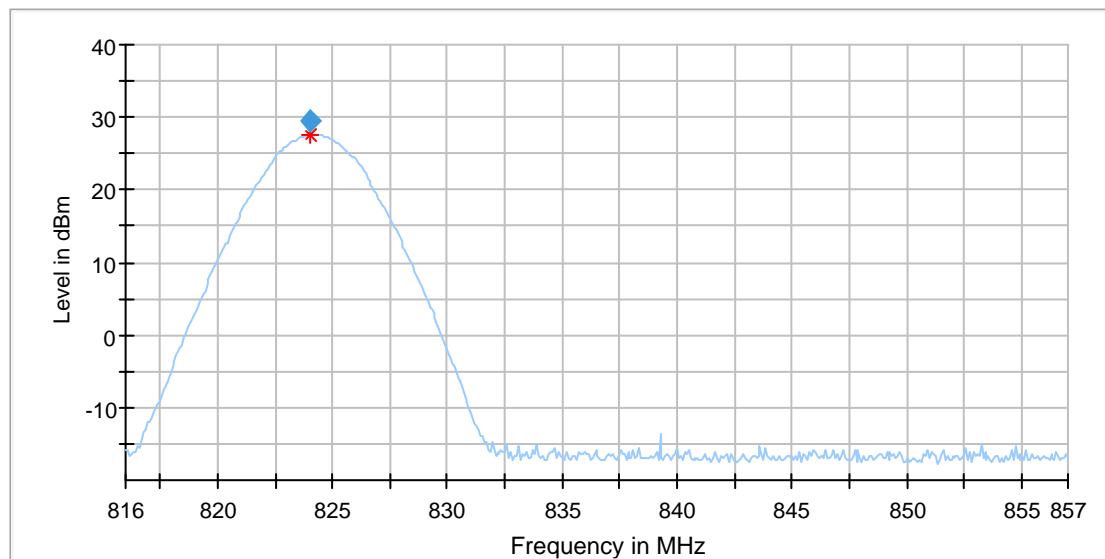
##### Common Information

Test Description:	GSM850 - ERP Carrier Measurement
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), Voice, PCL5 (+33dBm)
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 51%rH; Temperature: 21°C
Operator:	MNu/Kmo

##### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



##### Final Result

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Height (cm)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
824.025050	29.42	---	---	5000.0	155.0	V	-7.0	90.0	-75.8

## 7.02\_Carrier\_Measurement\_GSM850\_CH192\_nomVolt

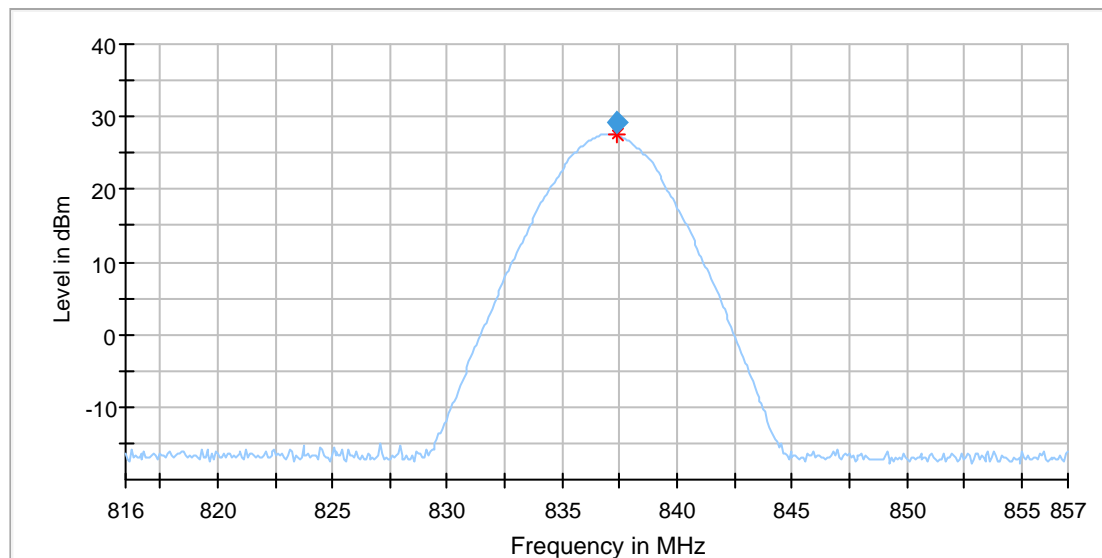
### Common Information

Test Description:	GSM850 - ERP Carrier Measurement
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917
Operating Mode:	MS allocated channel 192 (fc = 837.0MHz), Voice, PCL0 (+33dBm)
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 51%rH; Temperature: 21°C
Operator:	Kmo

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	-----
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



### Final Result

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Height (cm)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
837.357715	29.18	---	---	5000.0	155.0	V	-8.0	90.0	-75.7

### 7.03\_Carrier\_Measurement\_GSM850\_CH251\_nomVolt

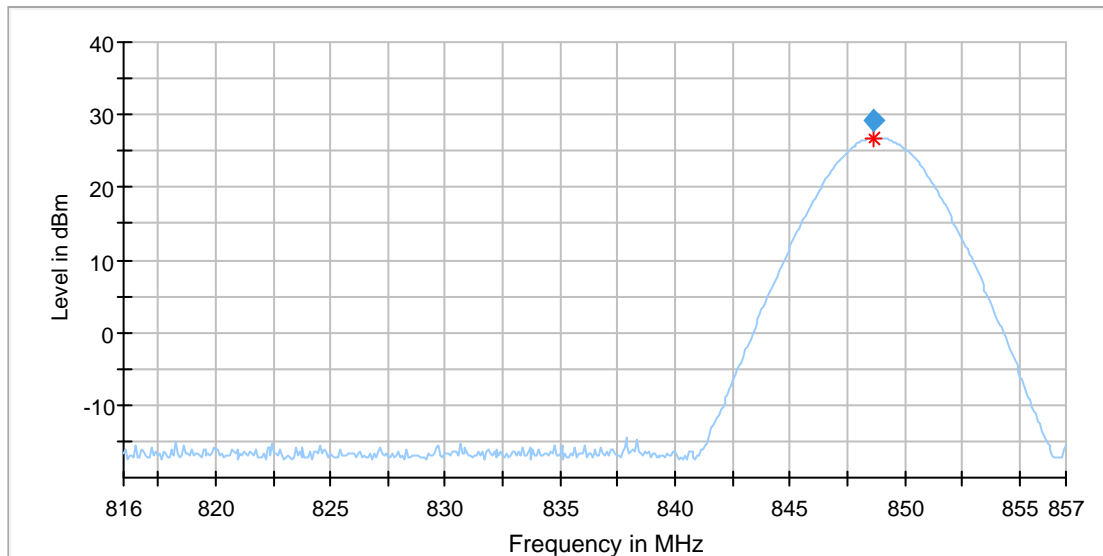
#### Common Information

Test Description: GSM850 - ERP Carrier Measurement  
 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), Voice, PCL0 (+33dBm)  
 Exclusionband: 824 - 849MHz  
 Environmental Conditions: Humidity: 51%rH; Temperature: 21°C  
 Operator: Kmo

#### EUT Information

Manufacturer: Ascom AB  
 EuT: SH1-ACAA/PF  
 -----  
 HW Version:  
 SW Version: myco-eng 4.4.2 daily\_2014-12-11\_eng daily\_379\_214-12-11 dev-keys  
 Serial Number: T26105EB77  
 Connected Interfaces: 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)  
 Power Supply: 230VAC  
 Comments:

Full Spectrum



#### Final Result

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Height (cm)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
848.660320	29.32	---	---	5000.0	155.0	V	-8.0	90.0	-75.9

## 7.04\_Carrier\_Measurement\_GSM850\_E-GPRS\_CH128\_nomVolt

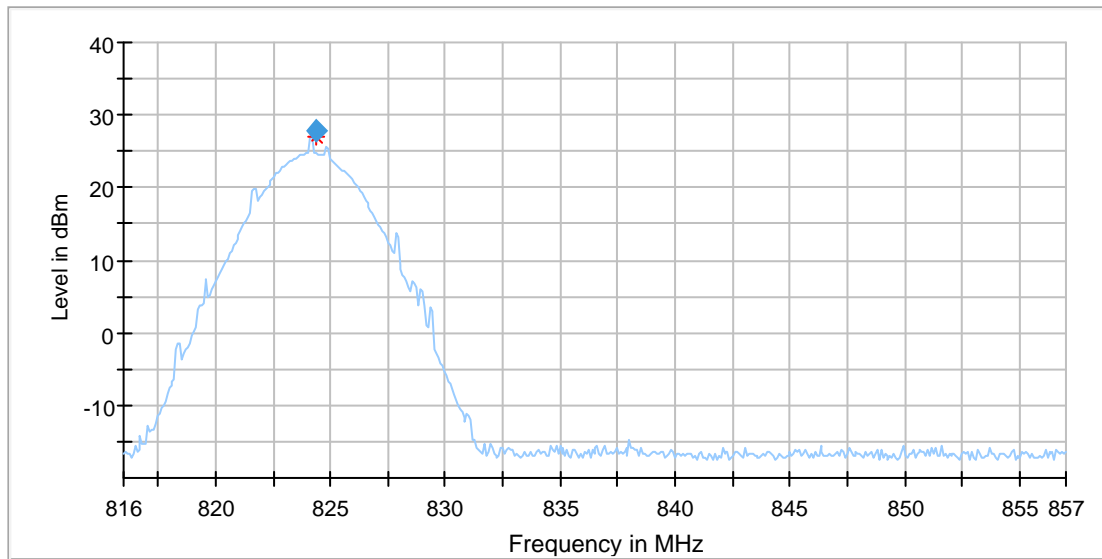
### Common Information

Test Description:	EGPRS850 - ERP Carrier Measurement
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(2) - Limitation of mobile transmitters
Operating Mode:	MS allocated channel 128 (fc = 824.2MHz), EGPRS, MCS5, Testmode A, 1 UL Slot (3) ,
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 51%rH; Temperature: 21°C
Operator:	Kmo

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



### Final Result

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Height (cm)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
824.369740	27.82	---	---	5000.0	155.0	V	272.0	90.0	-75.8

## 7.05\_Carrier\_Measurement\_GSM850\_E-GPRS\_CH192\_nomVolt

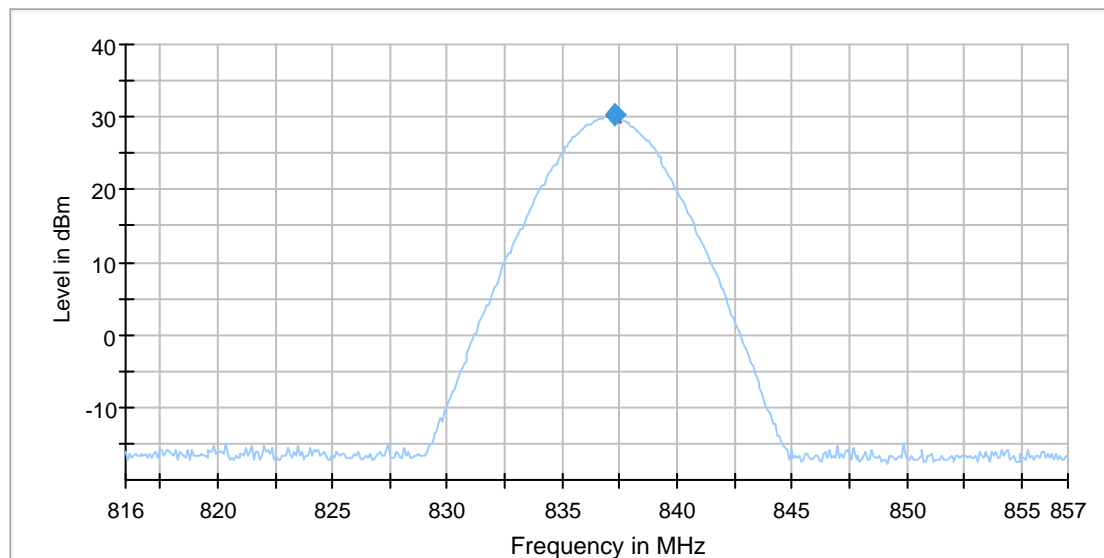
### Common Information

Test Description: Radiated Spurious Emissions GSM850  
 Test Site Location: CETECOM GmbH Essen  
 Test Site: Fully Anechoic Room (FAR)  
 Test Standard: FCC Part 22.917  
 Comm. Link: GSM850, EDGE  
 Operating Mode: MS allocated channel 192(UL = 837.0MHz)  
 Exclusionband: 824 - 849MHz  
 Environmental Conditions: Humidity: 50%rH; Temperature: 21°C  
 Operator: KMo

### EUT Information

Manufacturer: Ascom AB  
 EuT: SH1-ACAA/PF  
 -----  
 HW Version:  
 SW Version: myco-eng 4.4.2 daily\_2014-12-11\_eng daily\_379\_214-12-11 dev-keys  
 Serial Number: T26105EB77  
 Connected Interfaces: 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)  
 Power Supply: 230VAC  
 Comments:

Full Spectrum



### Final Result

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Height (cm)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
837.265531	30.28	---	---	5000.0	155.0	V	-9.0	90.0	-75.7

## 7.06\_Carrier\_Measurement\_GSM850\_E-GPRS\_CH251\_nomVolt

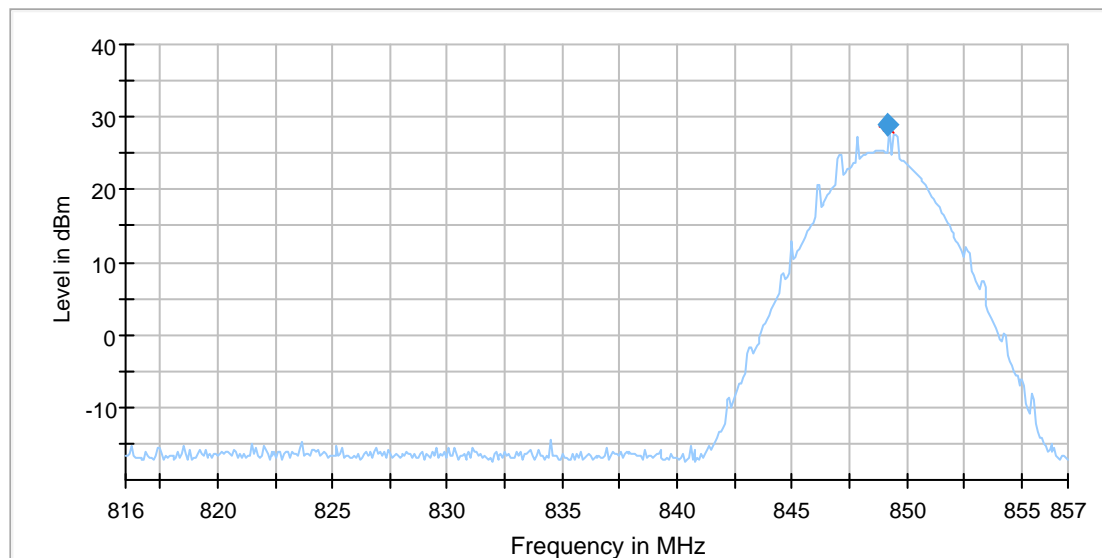
### Common Information

Test Description: Radiated Spurious Emissions GSM850  
 Test Site Location: CETECOM GmbH Essen  
 Test Site: Fully Anechoic Room (FAR)  
 Test Standard: FCC Part 22.917  
 Comm. Link: GSM850,EDGE  
 Operating Mode: MS allocated channe 251(UL = 848.8MHz)  
 Exclusionband: 824 - 849MHz  
 Environmental Conditions: Humidity: 50%rH; Temperature: 21°C  
 Operator: KMo

### EUT Information

Manufacturer: Ascom AB  
 EuT: SH1-ACAA/PF  
 -----  
 HW Version:  
 SW Version: myco-eng 4.4.2 daily\_2014-12-11\_eng daily\_379\_214-12-11 dev-keys  
 Serial Number: T26105EB77  
 Connected Interfaces: 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)  
 Power Supply: 230VAC  
 Comments:

Full Spectrum



### Final Result

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Height (cm)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
849.169339	28.93	---	---	5000.0	155.0	V	-8.0	90.0	-76.0

## 7.10\_Carrier\_Measurement\_FDDV\_RMC99\_CH4133\_nomVolt

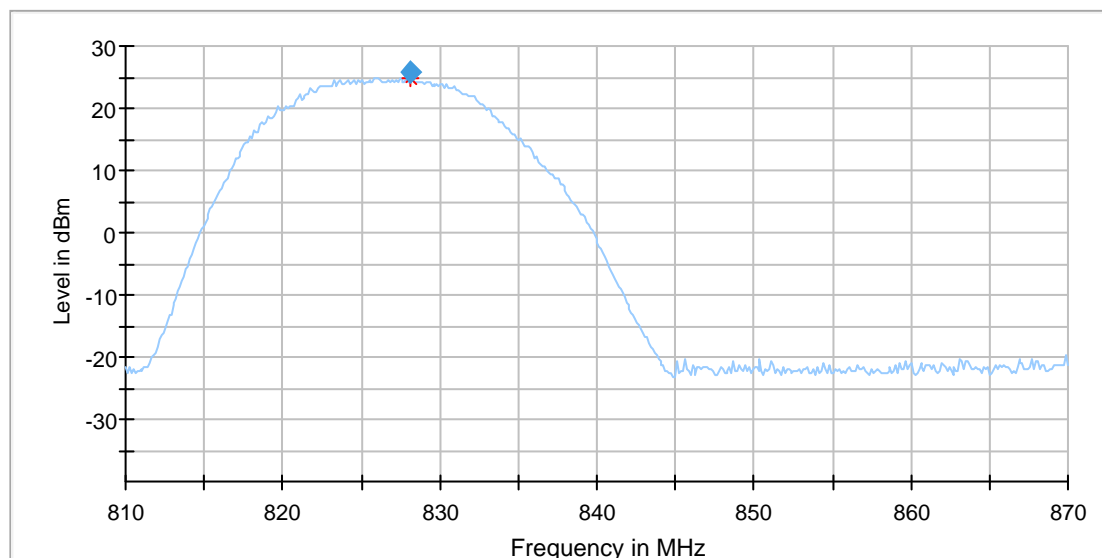
### Common Information

Test Description: Radiated Spurious Emissions UMTS FDDV  
 Test Site Location: CETECOM GmbH Essen  
 Test Site: Fully Anechoic Room (FAR)  
 Test Standard: FCC Part 22.917(a)  
 Operating Mode: UE allocated channel 4133 (fc = 826.6 MHz), RMC  
 Environmental Conditions: Humidity: 51%rH; Temperature: 21°C  
 Operator: KTa

### EUT Information

Manufacturer: Ascom AB  
 EuT: SH1-ACAA/PF  
 -----  
 HW Version:  
 SW Version: myco-eng 4.4.2 daily\_2014-12-11\_eng daily\_379\_214-12-11 dev-keys  
 Serial Number: T26105EB77  
 Connected Interfaces: 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)  
 Power Supply: 230VAC  
 Comments:

Full Spectrum



### Final Result

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
828.066132	25.89	---	---	10000.0	V	-10.0	90.0	-75.9



## 7.11\_Carrier\_Measurement\_FDDV\_RMC99\_CH4185\_nomVolt

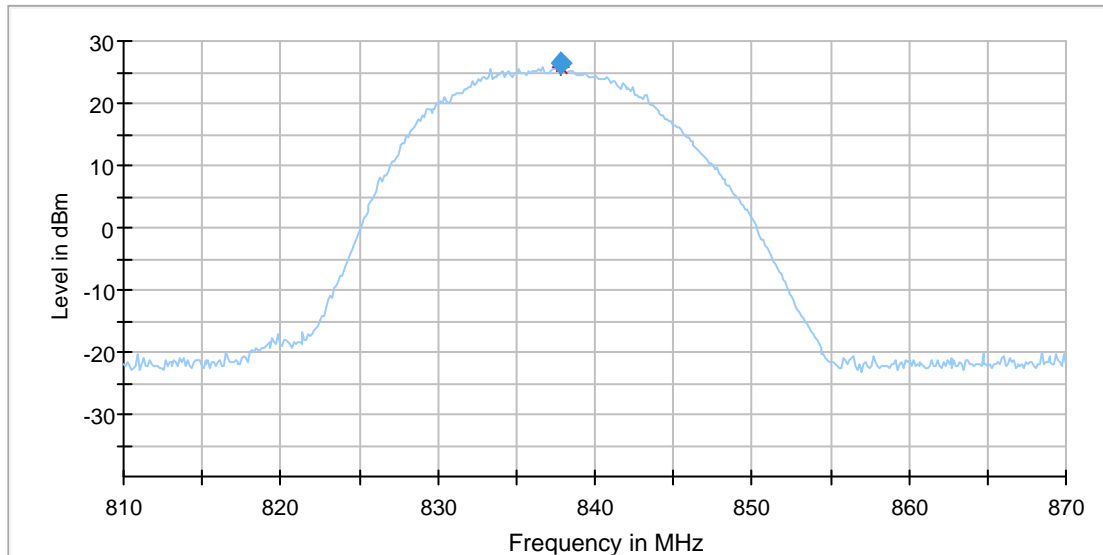
### Common Information

Test Description: Radiated Spurious Emissions UMTS FDDV  
 Test Site Location: CETECOM GmbH Essen  
 Test Site: Fully Anechoic Room (FAR)  
 Test Standard: FCC Part 22.917(a)  
 Operating Mode: UE allocated channel 4185 (fc = 837,0 MHz), RMC  
 Environmental Conditions: Humidity: 51%rH; Temperature: 21°C  
 Operator: KTa

### EUT Information

Manufacturer: Ascom AB  
 EuT: SH1-ACAA/PF  
 -----  
 HW Version:  
 SW Version: myco-eng 4.4.2 daily\_2014-12-11\_eng daily\_379\_214-12-11 dev-keys  
 Serial Number: T26105EB77  
 Connected Interfaces: 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)  
 Power Supply: 230VAC  
 Comments:

Full Spectrum



### Final Result

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
837.885772	26.49	---	---	10000.0	V	-8.0	90.0	-75.7

## 7.12\_Carrier\_Measurement\_FDDV\_RMC99\_CH4233\_nomVolt

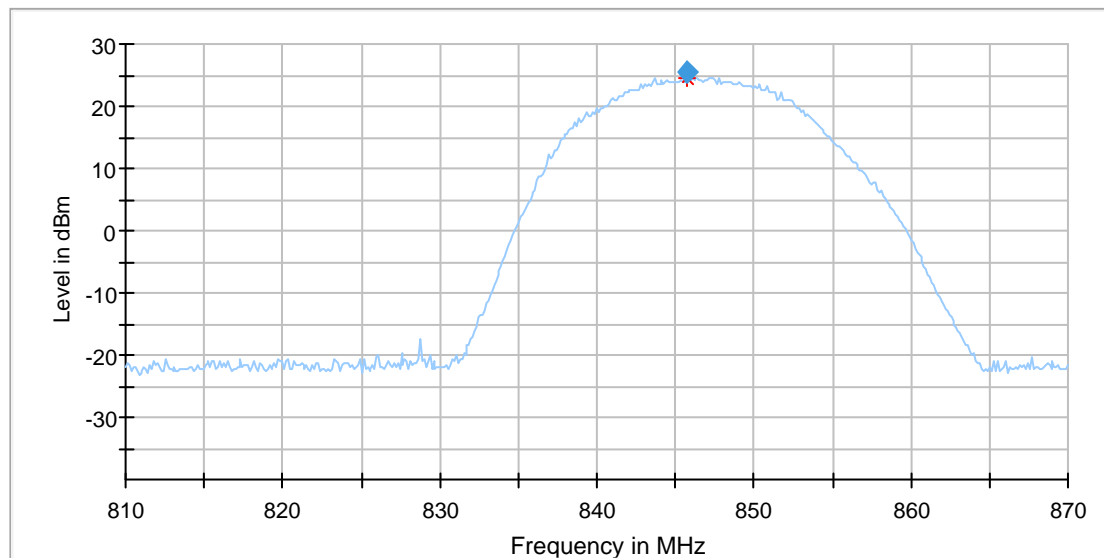
### Common Information

Test Description: Radiated Spurious Emissions UMTS FDDV  
 Test Site Location: CETECOM GmbH Essen  
 Test Site: Fully Anechoic Room (FAR)  
 Test Standard: FCC Part 22.917(a)  
 Operating Mode: UE allocated channel 4233 (fc = 846.6 MHz), RMC  
 Environmental Conditions: Humidity: 51%rH; Temperature: 21°C  
 Operator: KTa

### EUT Information

Manufacturer: Ascom AB  
 EuT: SH1-ACAA/PF  
 -----  
 HW Version:  
 SW Version: myco-eng 4.4.2 daily\_2014-12-11\_eng daily\_379\_214-12-11 dev-keys  
 Serial Number: T26105EB77  
 Connected Interfaces: 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)  
 Power Supply: 230VAC  
 Comments:

Full Spectrum



### Final Result

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Height (cm)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
845.761523	25.64	---	---	10000.0	155.0	V	-8.0	90.0	-75.9

## 1.4. Radiated RF power (1900 MHz transmitting mode)

### 7.01\_Carrier\_Measurement\_GSM1900\_Voice\_CH512\_nomVolt

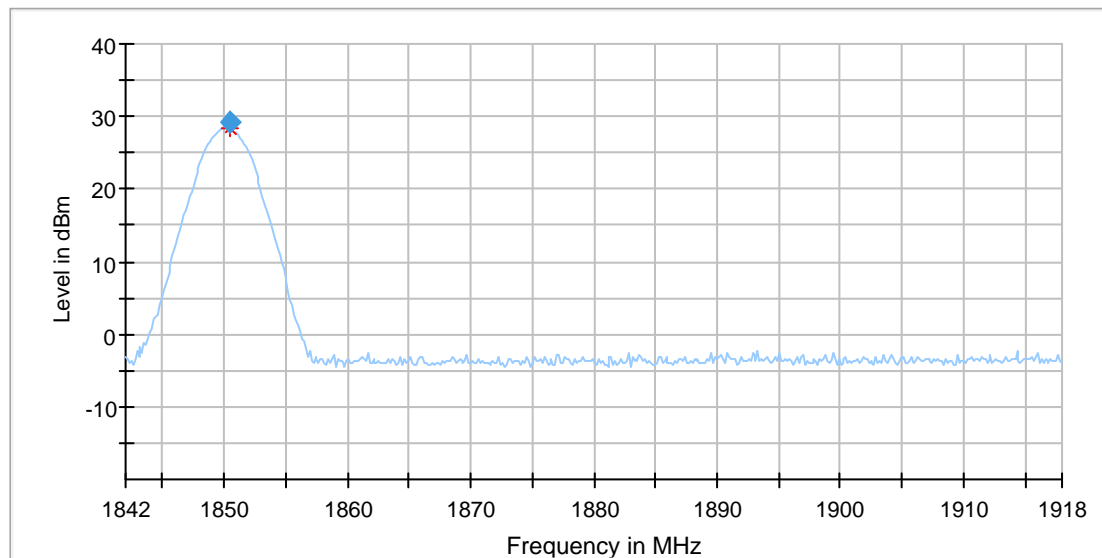
#### Common Information

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, Voice
Operating Mode:	MS allocated channel 512 (UL = 1850.2MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 50%rH; Temperature: 21°C
Operator:	KMo

#### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



#### Final Result

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Height (cm)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
1850.399800	29.23	---	---	500.0	155.0	V	254.0	90.0	-63.1

## 7.02\_Carrier\_Measurement\_GSM1900\_Voice\_CH661\_nomVolt

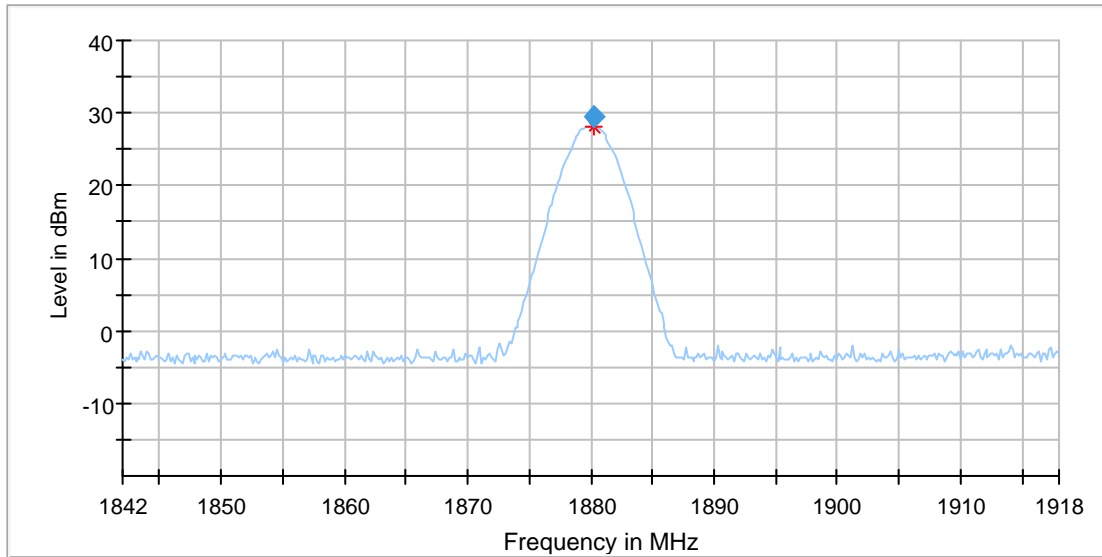
### Common Information

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, Voice  
 Operating Mode: MS allocated channel 661 (UL = 1880.0MHz)  
 Exclusionband: 1850- 1910MHz  
 Environmental Conditions: Humidity: 50%rH; Temperature: 21°C  
 Operator: KMo

### EUT Information

Manufacturer: Ascom AB  
 EuT: SH1-ACAA/PF  
 -----  
 HW Version:  
 SW Version: myco-eng 4.4.2 daily\_2014-12-11\_eng daily\_379\_214-12-11 dev-keys  
 Serial Number: T26105EB77  
 Connected Interfaces: 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)  
 Power Supply: 230VAC  
 Comments:

Full Spectrum



### Final Result

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Height (cm)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
1880.309620	29.38	---	---	500.0	155.0	V	253.0	90.0	-63.0

## 7.03\_Carrier\_Measurement\_GSM1900\_Voice\_CH810\_nomVolt

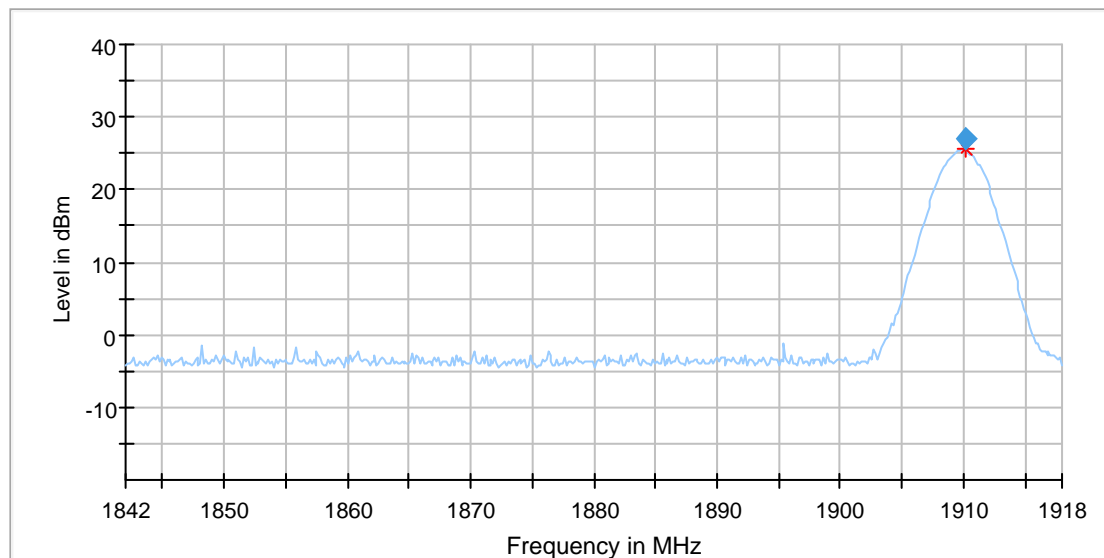
### Common Information

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, Voice
Operating Mode:	MS allocated channel 810 (UL = 1909,8MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 50%rH; Temperature: 21°C
Operator:	KMo

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



### Final Result

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Height (cm)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
1910.163327	27.10	---	---	500.0	155.0	V	255.0	90.0	-62.8

## 7.07\_Carrier\_Measurement\_GSM1900\_E-GPRS\_CH512\_nomVolt

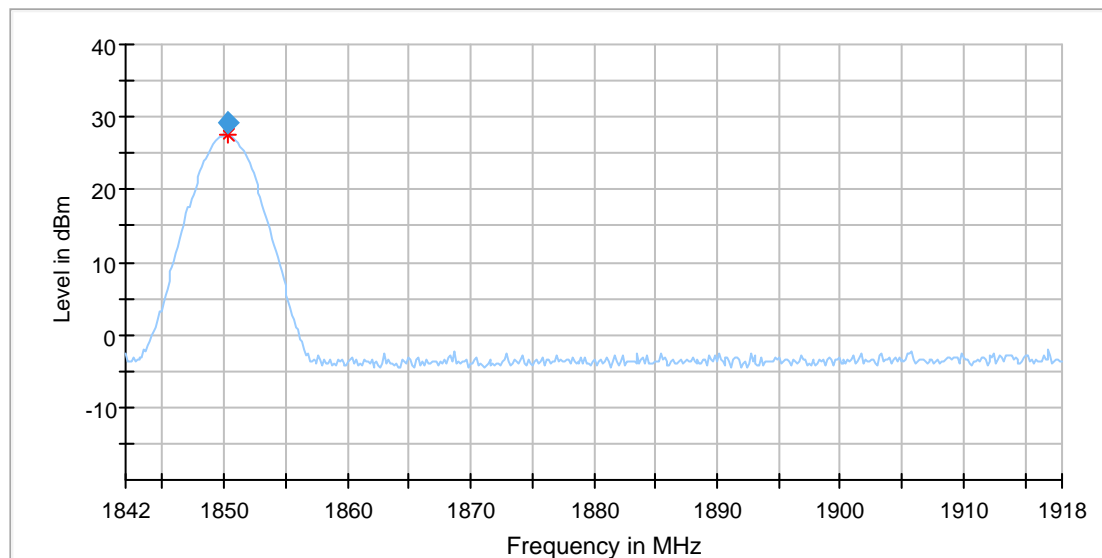
### Common Information

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:	GSM850,EDGE
Operating Mode:	MS allocated channel 512 (UL = 1850.2MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 50%rH; Temperature: 21°C
Operator:	KMo

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



### Final Result

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Height (cm)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
1850.261524	29.10	---	---	500.0	155.0	V	259.0	90.0	-63.1

## 7.08\_Carrier\_Measurement\_GSM1900\_E-GPRS\_CH661\_nomVolt

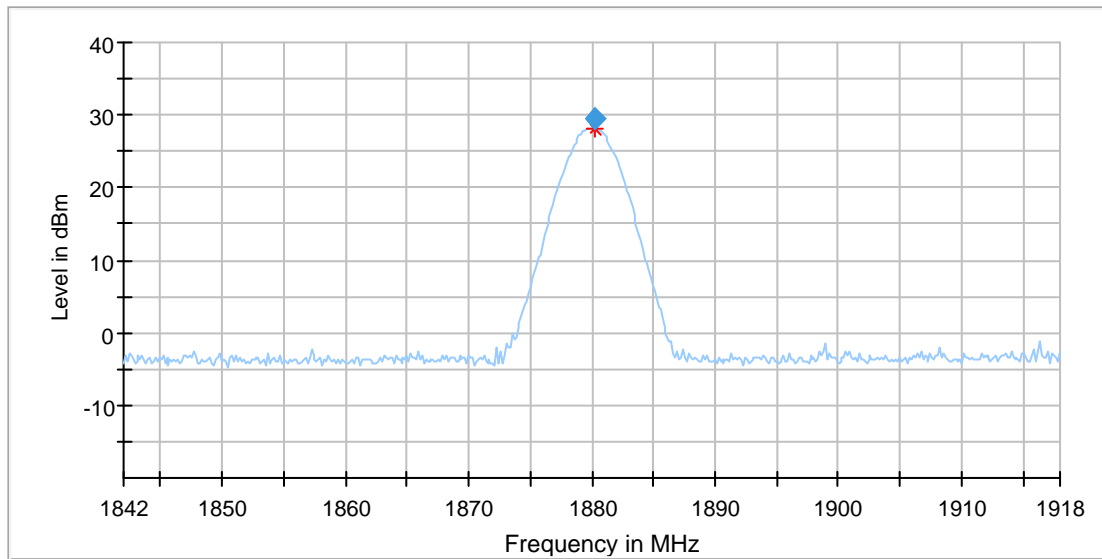
### Common Information

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:	GSM850,EDGE
Operating Mode:	MS allocated channel 661(UL = 1880.0MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 50%rH; Temperature: 21°C
Operator:	KMo

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



### Final Result

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Height (cm)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
1880.299600	29.38	---	---	500.0	155.0	V	254.0	90.0	-63.0

## 7.09\_Carrier\_Measurement\_GSM1900\_E-GPRS\_CH810\_nomVolt

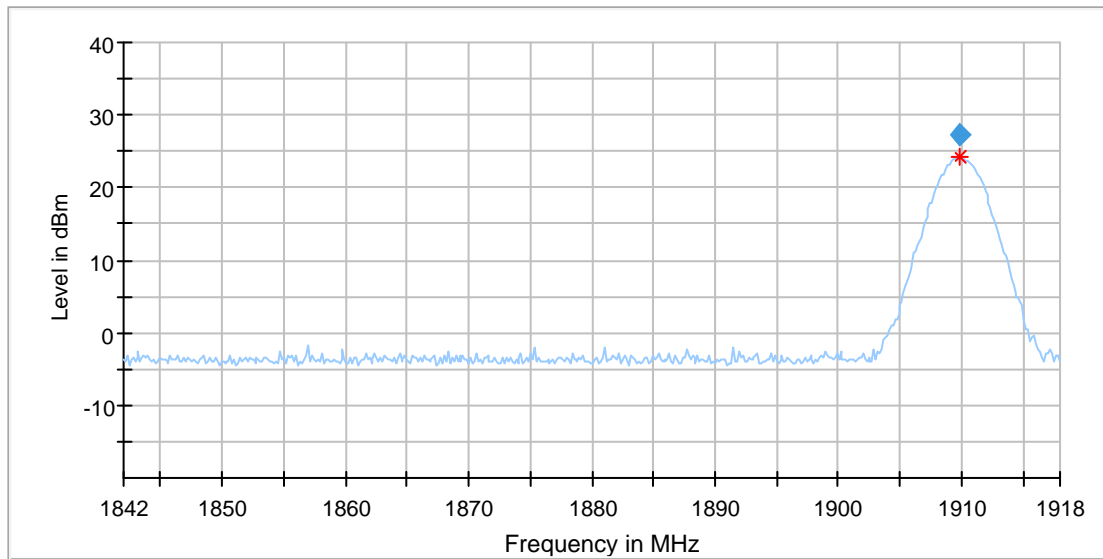
### Common Information

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: GSM850,EDGE  
 Operating Mode: MS allocated channel 810 (UL = 1910.0MHz)  
 Exclusionband: 1850- 1910MHz  
 Environmental Conditions: Humidity: 50%rH; Temperature: 21°C  
 Operator: KMo

### EUT Information

Manufacturer: Ascom AB  
 EuT: SH1-ACAA/PF  
 -----  
 HW Version:  
 SW Version: myco-eng 4.4.2 daily\_2014-12-11\_eng daily\_379\_214-12-11 dev-keys  
 Serial Number: T26105EB77  
 Connected Interfaces: 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)  
 Power Supply: 230VAC  
 Comments:

Full Spectrum



### Final Result

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Height (cm)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
1909.824649	27.22	---	---	500.0	155.0	V	254.0	90.0	-62.8



## 1.5. Spurious emissions radiated (850 MHz transmitting mode)

### 8.04\_RSE\_GSM850\_E-GPRS\_Ch128\_nomVolt

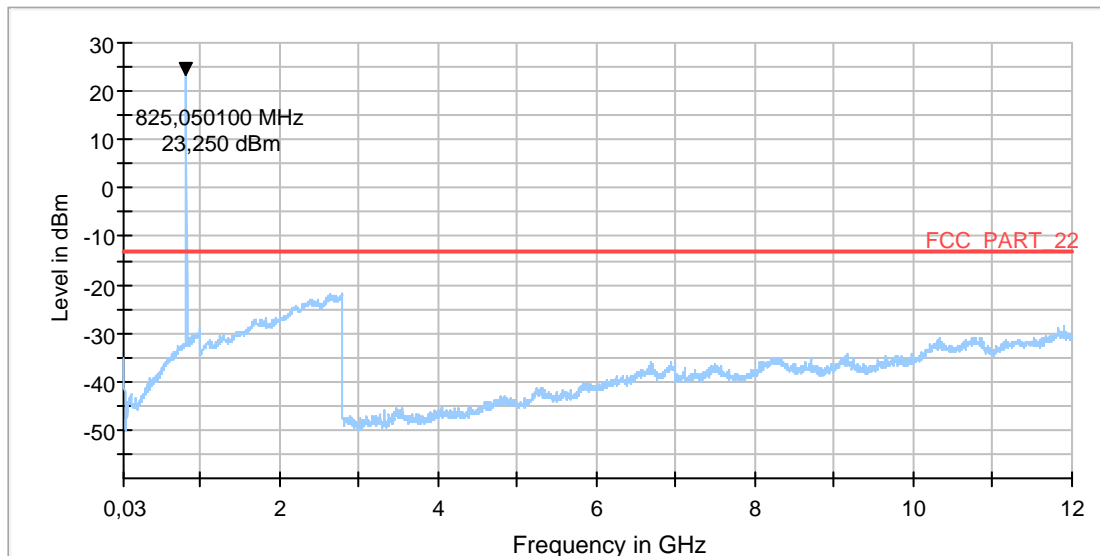
#### Common Information

Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917
Test Case:	Radiated Spurious Emission
Operating Mode:	MS allocated UL channel 128
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 31%rH; Temperature: 21°C
Operator:	AHo/NPe

#### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



## 8.05\_RSE\_GSM850\_E-GPRS\_Ch192\_nomVolt

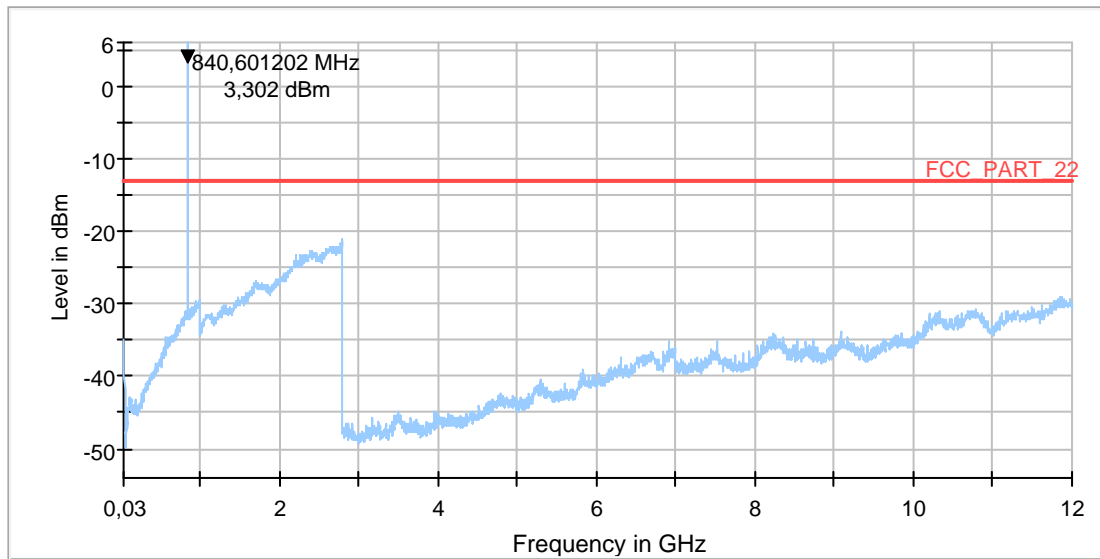
### Common Information

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: 50%rH; Temperature: 21°C
Operator:	Kta

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



## 8.06\_RSE\_GSM850\_E-GPRS\_Ch251\_nomVolt

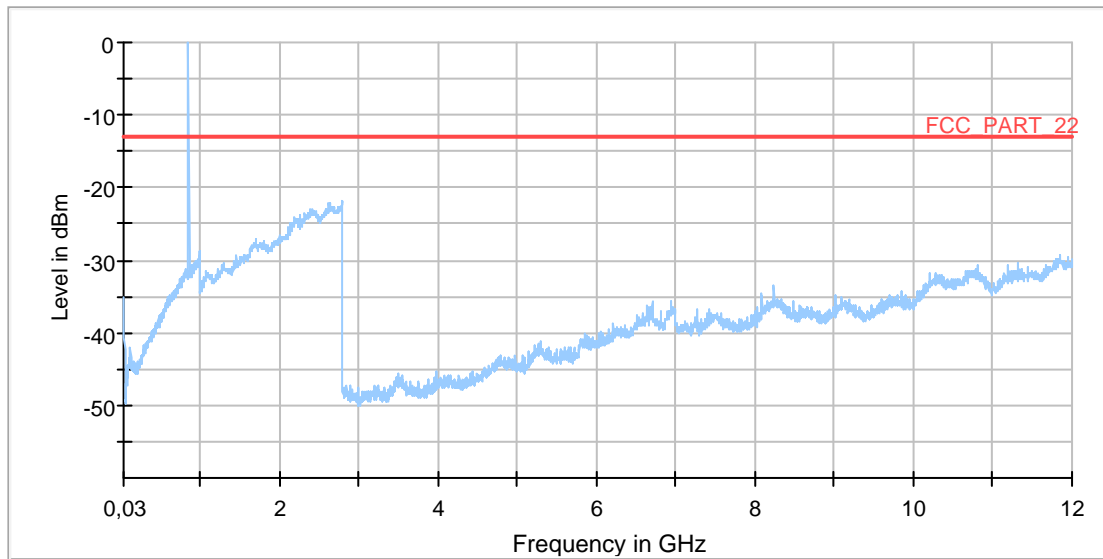
### Common Information

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: 31%rH; Temperature: 21°C
Operator:	Kta

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



## 8.07\_RSE\_FDDV\_RMC99\_Ch4132\_nomVolt

### Common Information

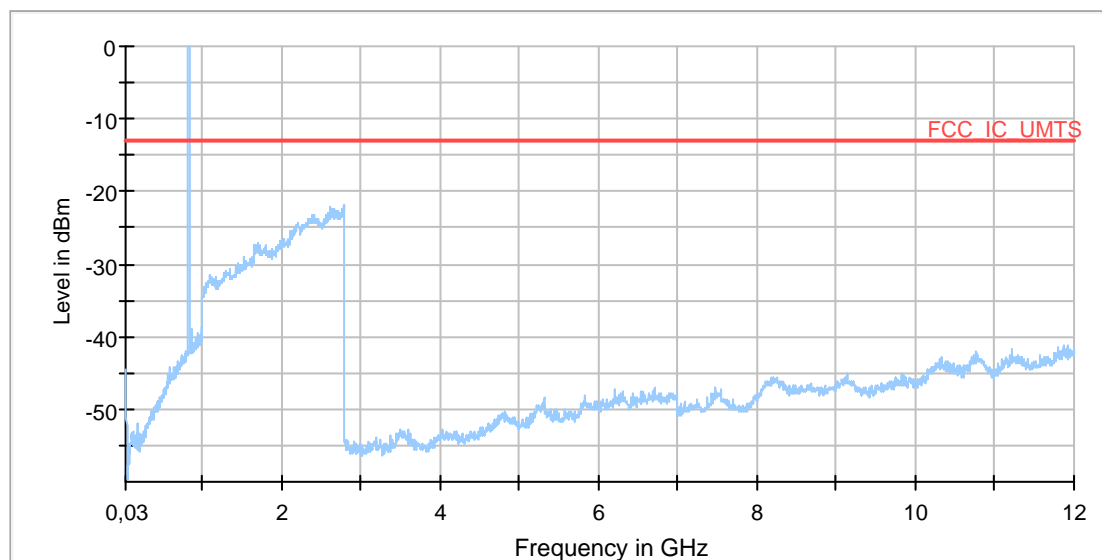
Test Description:	Radiated Spurious Emissions UMTS FDDV
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 4132, RMC

Environmental Conditions:	Humidity: 31%rH; Temperature: 22°C
Operator:	Kta

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	-----
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



## 8.08\_RSE\_FDDV\_RMC99\_Ch4183\_nomVolt

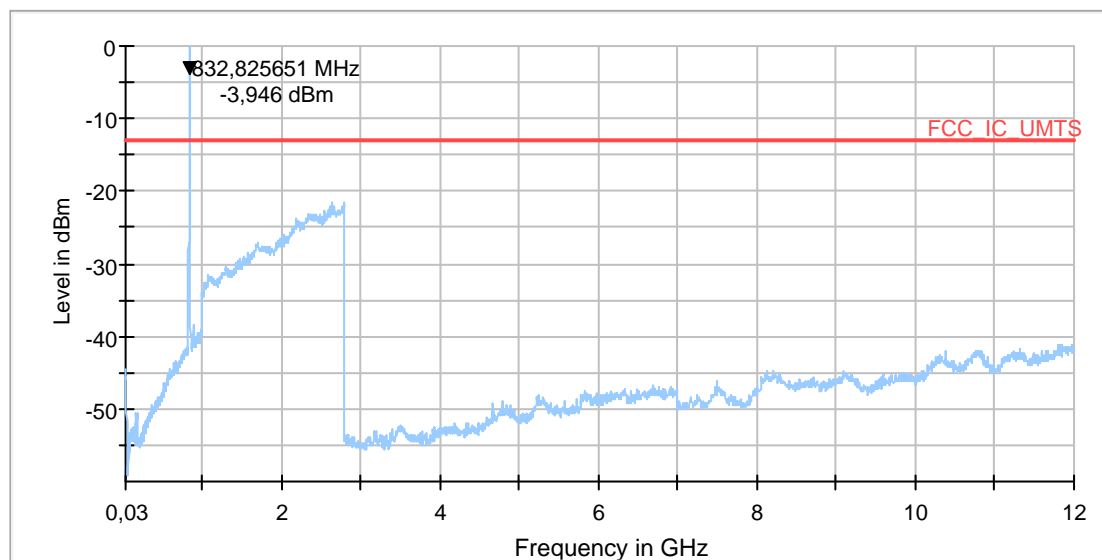
### Common Information

Test Description:	Radiated Spurious Emissions UMTS FDDV
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 4183, RMC
Environmental Conditions:	Humidity: 51%rH; Temperature: 21°C
Operator:	KTa

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	-----
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



## 8.09\_RSE\_FDDV\_RMC99\_Ch4233\_nomVolt

### Common Information

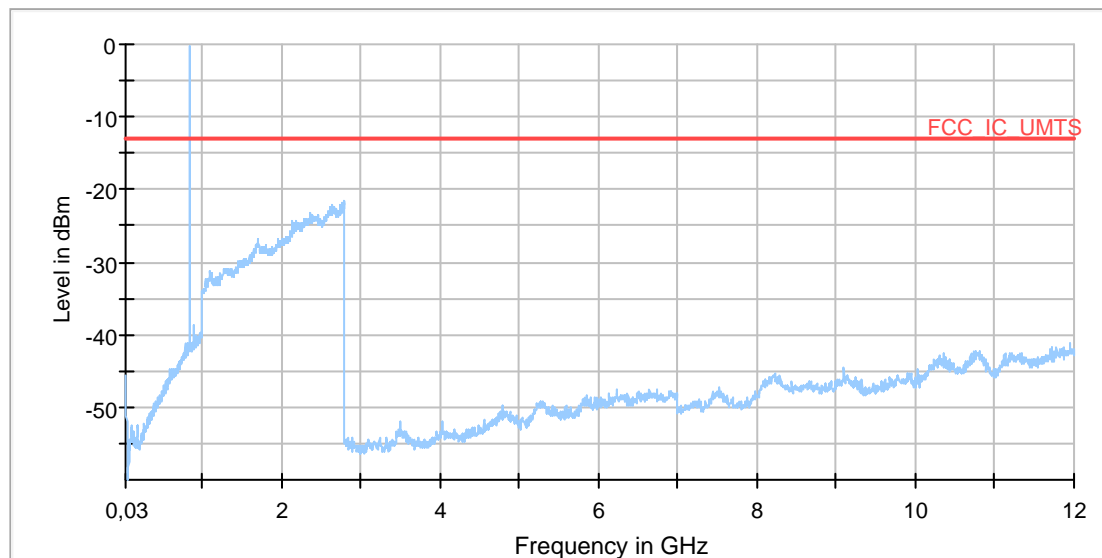
Test Description:	Radiated Spurious Emissions UMTS FDDV
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 4233

Environmental Conditions:	Humidity: 31%rH; Temperature: 22°C
Operator:	Kta

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	-----
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



## 1.6. Spurious emissions radiated (1900 MHz transmitting mode)

### 8.01\_RSE\_GSM1900\_GPRS\_Ch512\_nomVolt

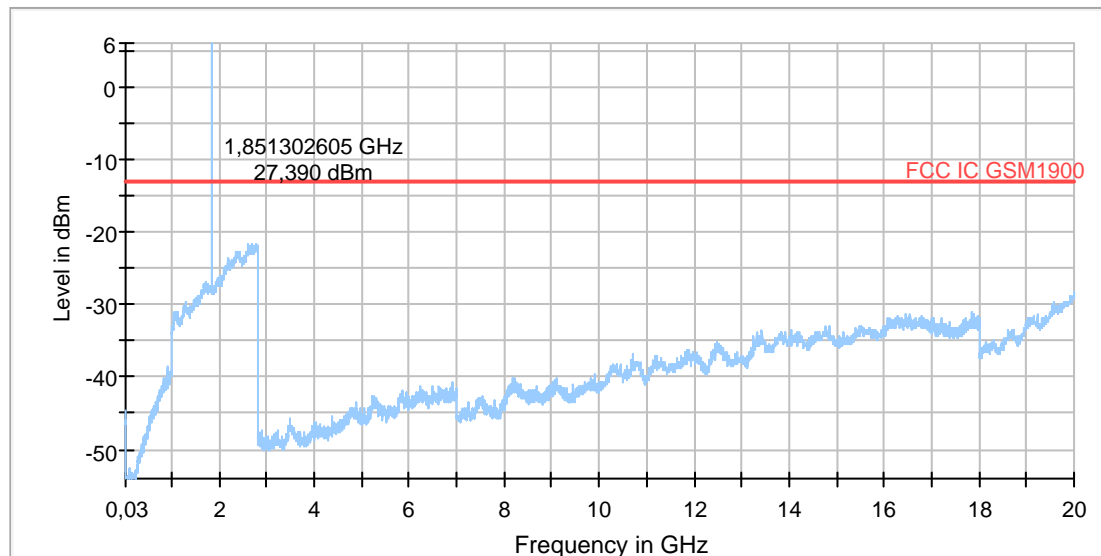
#### Common Information

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, Voice/EDGE
Operating Mode:	MS allocated channel 512 (UL = 1850.2MHz),661(UL = 1880.0MHz),810 (UL = 1909.8MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 31%rH; Temperature: 21°C
Operator:	AHo/NPe

#### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	-----
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



## 8.02\_RSE\_GSM1900\_GPRS\_Ch661\_nomVolt

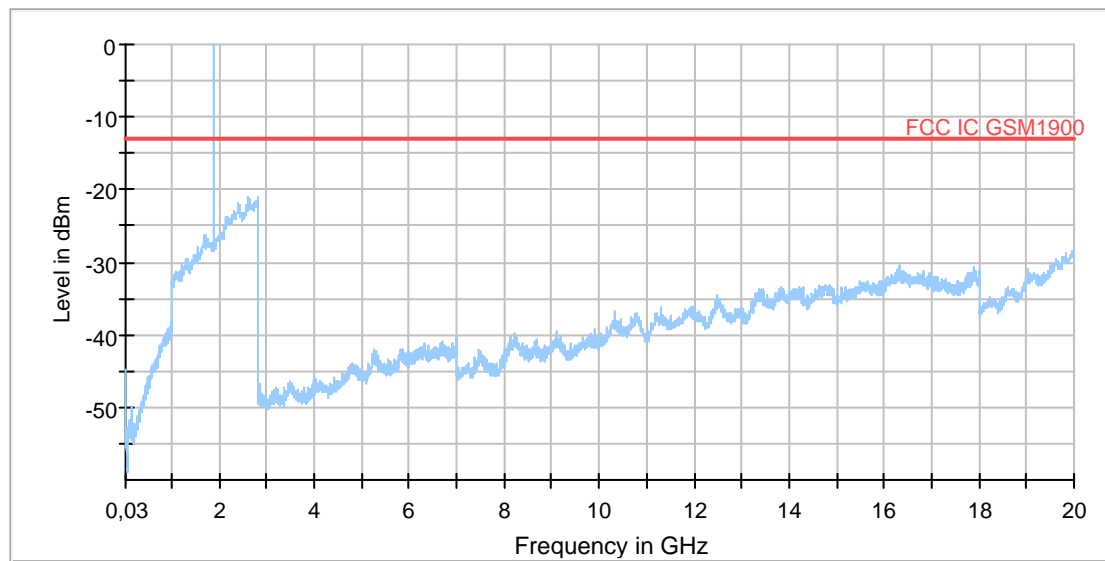
### Common Information

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, Voice/EDGE
Operating Mode:	MS allocated channel 661(UL = 1880.0MHz),
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 50%rH; Temperature: 21°C
Operator:	Kta

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum





## 8.03\_RSE\_GSM1900\_GPRS\_Ch810\_nomVolt

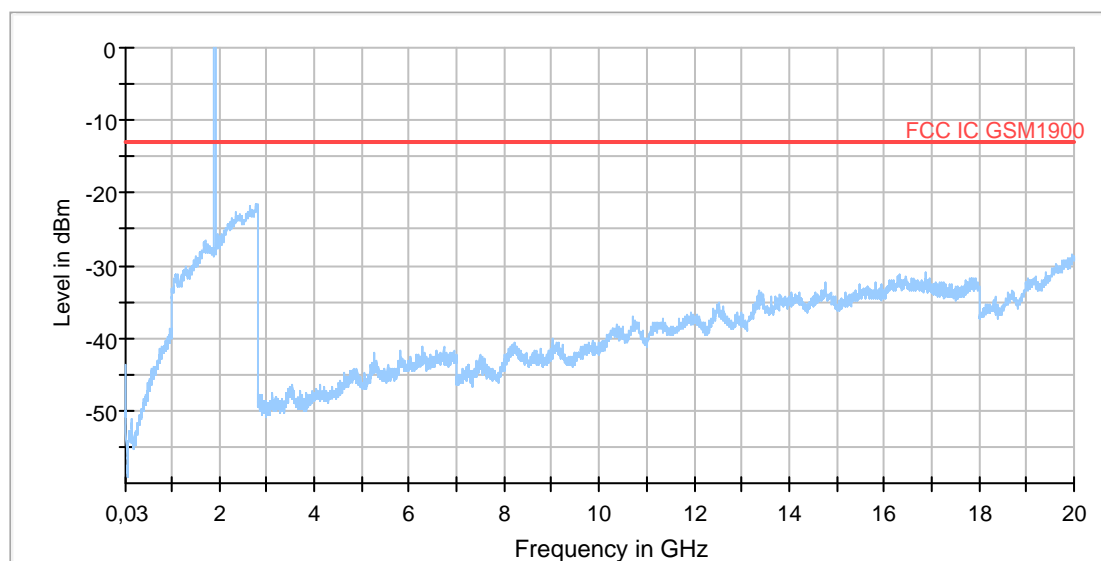
### Common Information

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, Voice/EDGE
Operating Mode:	MS allocated channel 512 (UL = 1850.2MHz),661(UL = 1880.0MHz),810 (UL = 1909.8MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 31%rH; Temperature: 21°C
Operator:	AHo/NPe

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



## 1.7. Radiated emissions on 850 MHz transmitting band-edge

### 9.01\_BE\_GSM850\_E-GPRS\_Ch128\_nomVolt

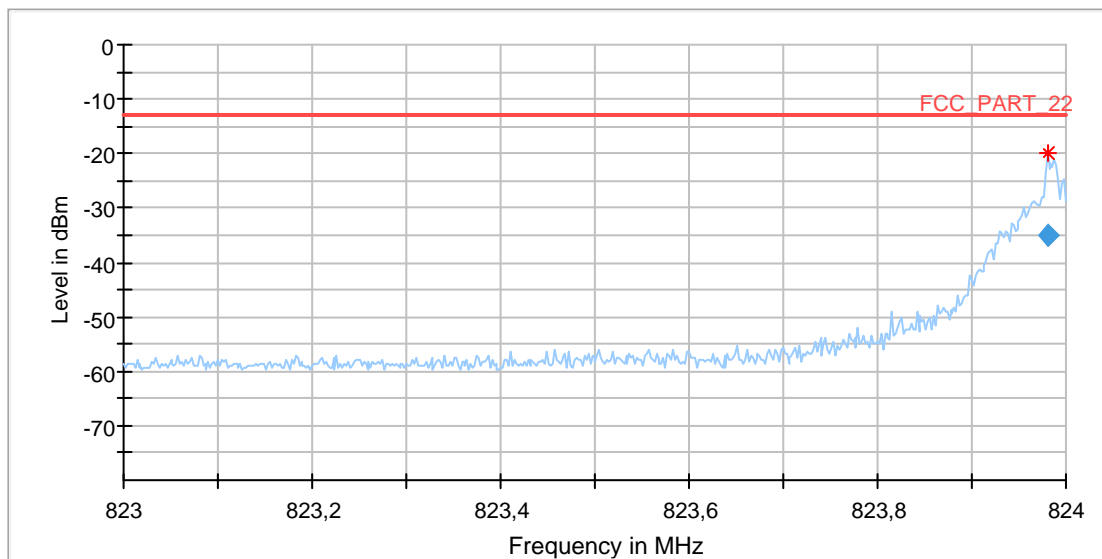
#### Common Information

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), Voice, PCL5 (+33dBm)
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 23%H; Temperature:21°C
Operator:	npe

#### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



#### Final Result

Frequency (MHz)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
823.979960	-13.00	21.95	10000.0	V	180.0	90.0	-75.8

## 9.02\_BE\_GSM850\_E-GPRS\_Ch251\_nomVolt

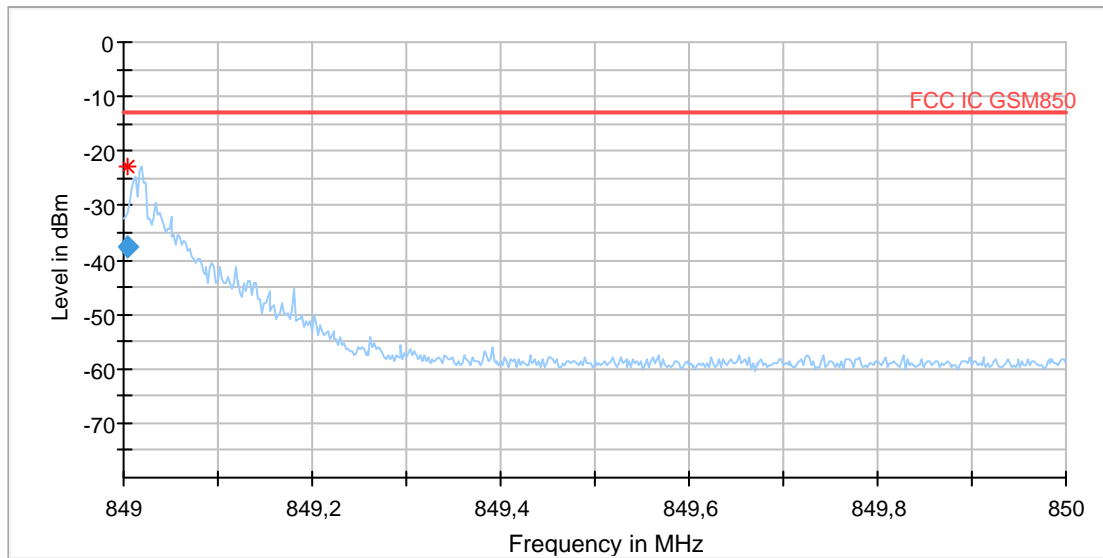
### Common Information

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), Voice, PCL0 (+33dBm)  
 Exclusionband: 824 - 849MHz  
 Environmental Conditions: Humidity: 23%rH; Temperature:21°C  
 Operator: npe

### EUT Information

Manufacturer: Ascom AB  
 EuT: SH1-ACAA/PF  
 -----  
 HW Version:  
 SW Version: myco-eng 4.4.2 daily\_2014-12-11\_eng daily\_379\_214-12-11 dev-keys  
 Serial Number: T26105EB77  
 Connected Interfaces: 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)  
 Power Supply: 230VAC  
 Comments:

Full Spectrum



### Final Result

Frequency (MHz)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
849.004008	-13.00	24.43	10000.0	V	152.0	90.0	-75.9

## 9.03\_BE\_FDDV\_RMC99\_CH4132\_nomVolt

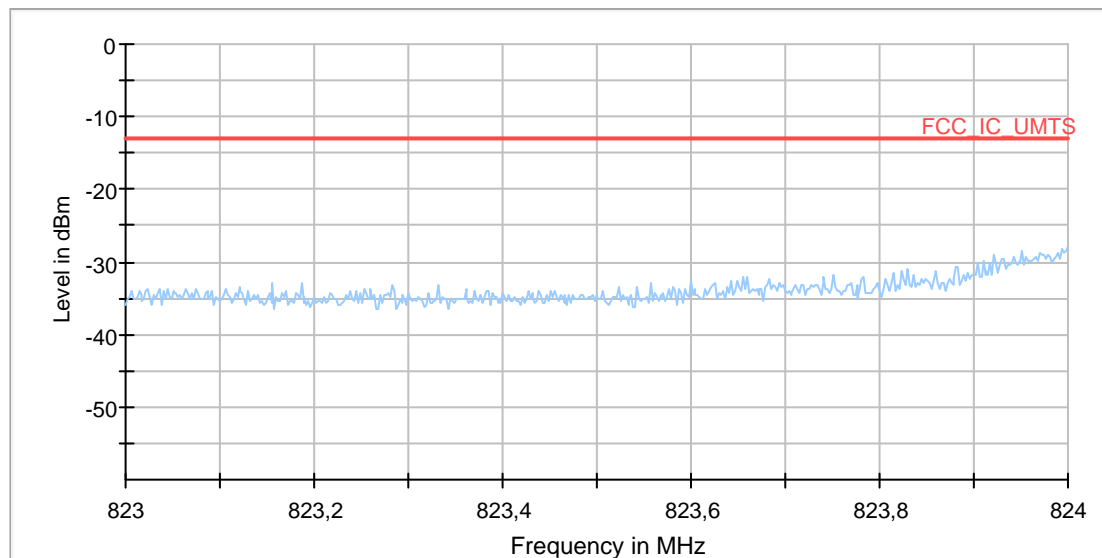
### Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions UMTS FDDV
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR) - EMC32 V9.15.00
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 4132
Environmental Conditions:	Humidity: 23%rH; Temperature: 20°C
Operator:	Kta
Remarks:	EUT - laying/standing position

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	-----
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



## 9.04\_BE\_FDDV\_RMC99\_CH4233\_nomVolt

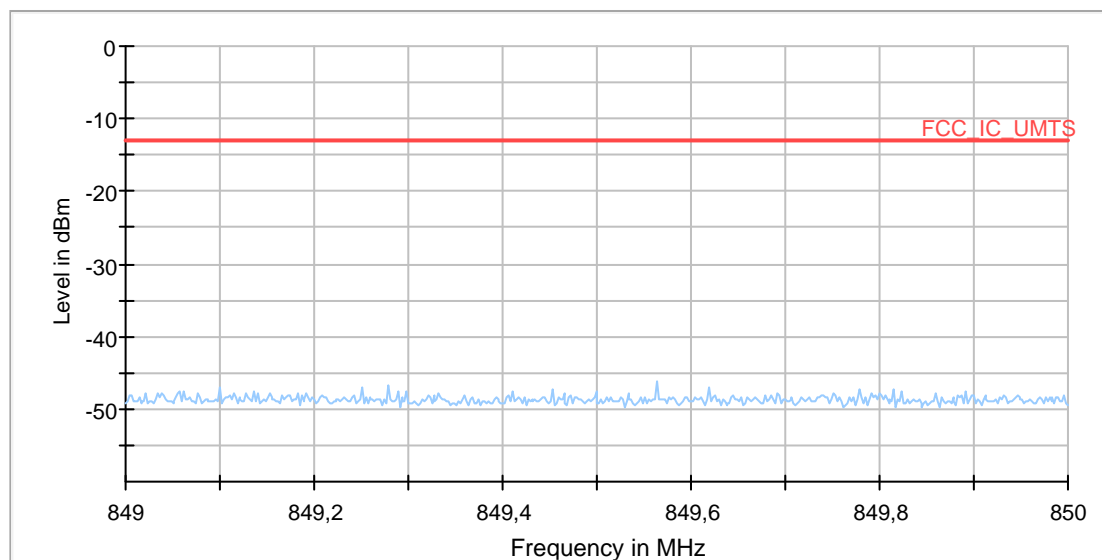
### Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions UMTS FDDV
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR) - EMC32 V9.15.00
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 4233
Environmental Conditions:	Humidity: 23%rH; Temperature: 20°C
Operator:	Kta
Remarks:	EUT - laying/standing position

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	-----
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



## 1.8. Radiated emissions on 1900 MHz transmitting band-edge

### 9.05\_BE\_GPRS1900\_Ch512\_nomVolt

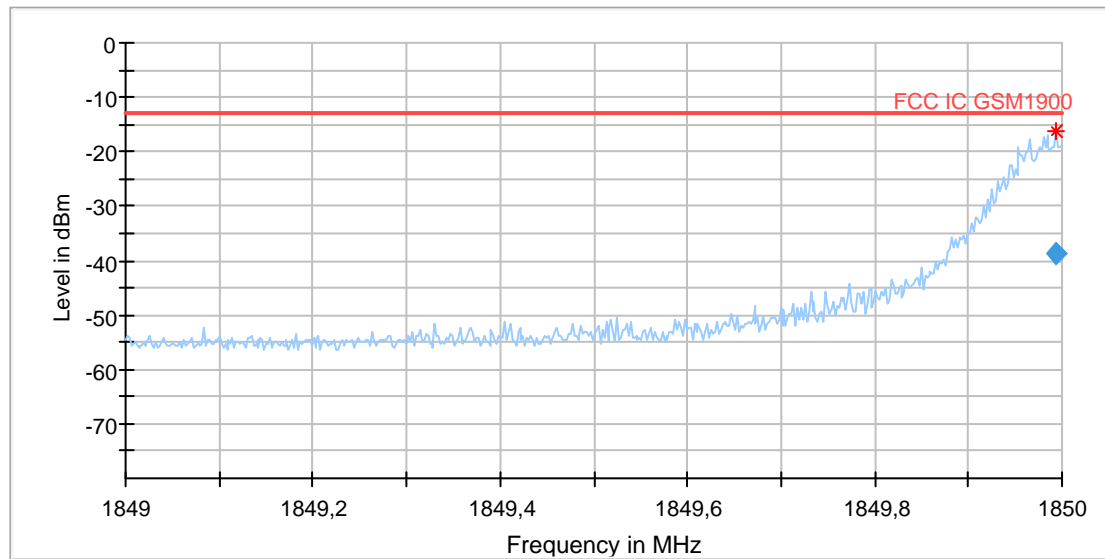
#### Common Information

Test Description:	Radiated Band Edge Compliance 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: 23%rH; Temperature: 21°C
Operator:	npe

#### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



#### Final Result

Frequency (MHz)	Average (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)
1849.993988	-38.68	-13.00	25.68	10000.0	3.000	V	268.0	90.0	-63.1

## 9.06\_BE\_GPRS1900\_Ch810\_nomVolt

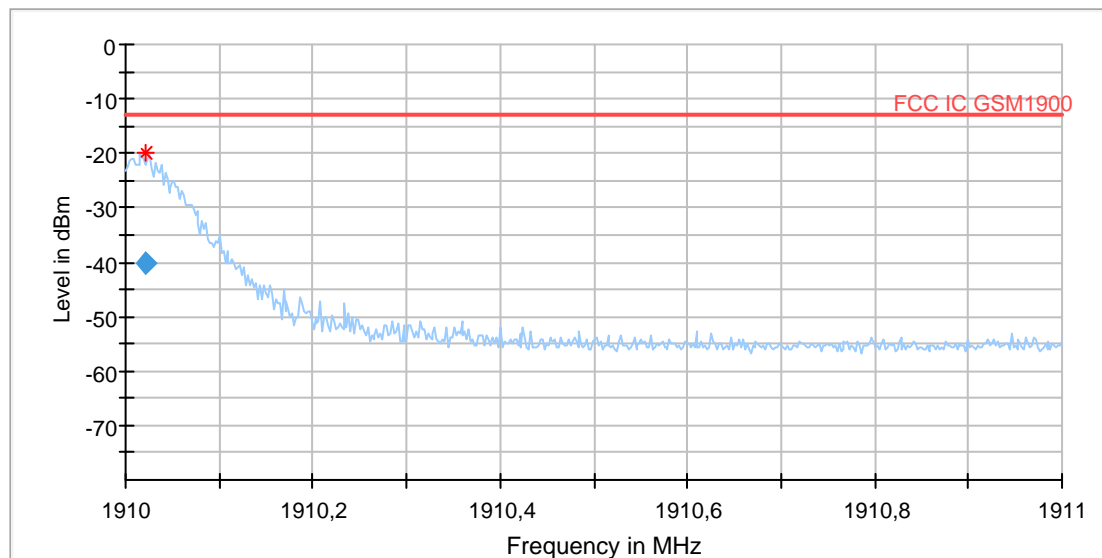
### Common Information

Test Description:	Radiated Band Edge Compliance 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: 23%rH; Temperature: 21°C
Operator:	npe

### EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

Full Spectrum



### Final Result

Frequency (MHz)	Average (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Po l	Azimuth (deg)	Elevation (deg)	Corr. (dB)
1910.022044	-40.35	-13.00	27.35	10000.0	3.000	H	264.0	0.0	-62.8