

## Annex 1: Measurement diagrams 18-1-0257110T02a-A1

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<b>Testing company:</b>	CETECOM GmbH Im Teelbruch 116 45219 Essen Germany Tel. + 49 (0) 20 54 / 95 19-0 Fax: + 49 (0) 20 54 / 95 19-150	<b>Applicant:</b>	Continental Advanced Antenna GmbH
<b>Product:</b> <b>Model:</b>	RKE module RKE223E1		
<b>FCC ID:</b>	Contains: 2ACC7RKE223E1	<b>IC:</b>	Contains: 11980A-RKE223E1
<b>Testing has been carried out in accordance with:</b>	<b>FCC Regulations:</b> Title 47 CFR, Chapter I, Subchapter A, Subpart C: §15.231 <b>ISED Regulations:</b> RSS-210, Issue 10, Annex A  Deviations, modifications or clarifications (if any) to above mentioned documents are written in each section under "Test method and limit".		

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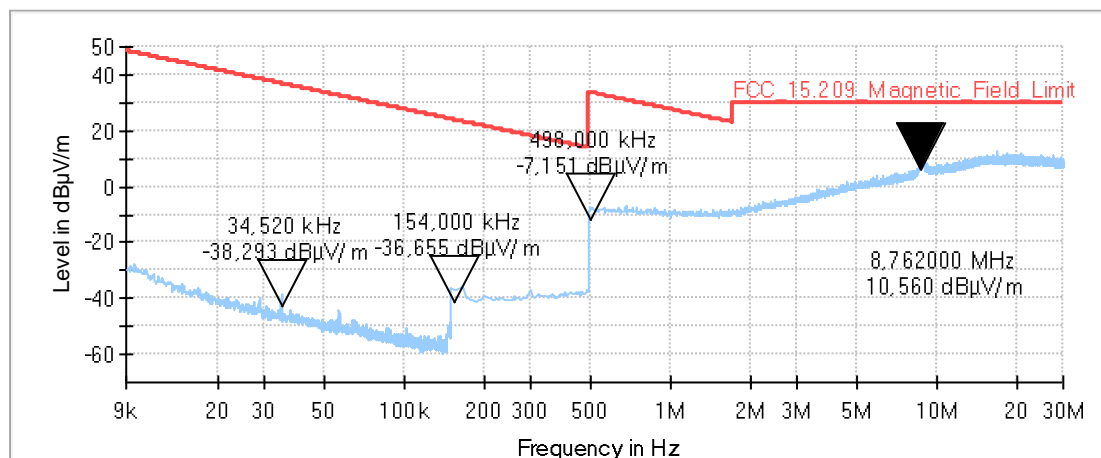
## 1 Measurement diagrams

### 1.1 Magnetic field strength from 9kHz up to 30MHz

#### Diagram No. 2.01\_TX\_Ch2\_Ant2\_horizontal

Date:	23.02.2021	Page 1 of 1
Test description:	Electric Field Strength Measurement related to 3m distance	
Test site and distance:	Ref.-Nr. 225911, Semi Anechoic Chamber (SAC5) with 3m measurement distance	
Test Location:	CETECOM GmbH Düsseldorf	
Version of Testsoftware:	EMC32 V10.0.0	
Test specification:	FCC15.209 / RSS-Gen Issue 5	
Distance correction:	300/30m to 3m	
Operating Mode:	TX-Mode continuous, Ch2, RF-Path antenna 2	
Technical Data:	Please see page 2 for detailed data of measurement setup	
Used filter:	none up to 3GHz	
Climatic conditions:	%rh: 43, temp: 19.1	
Power during test:	car battery, 12 V DC	
Measured side(s):	front, right, rear, left	
Operator:	Lor	
Comment:	IR-rear glas (AE2) used on car	

Full Spectrum

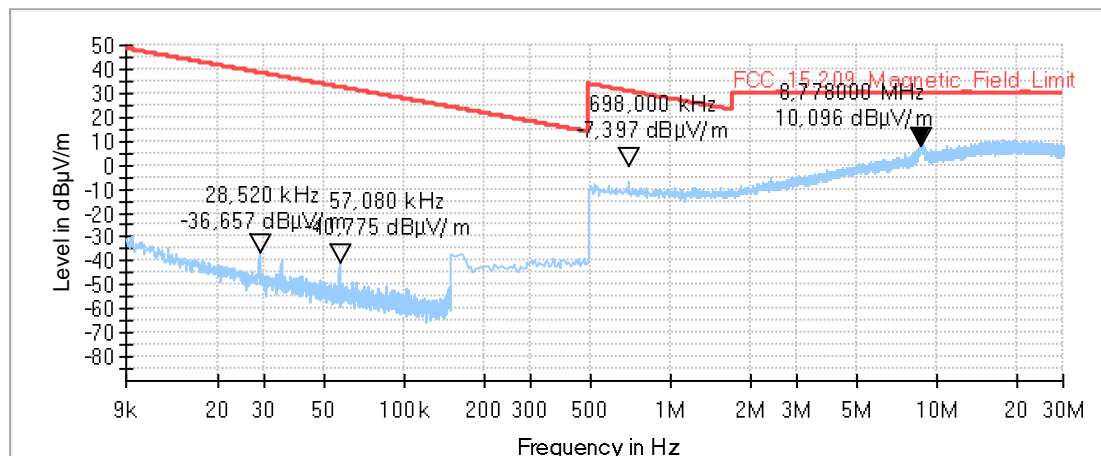


◆ Preview Result 1-PK+ [Preview Result 1.Result:1]

## Diagram No. 2.02\_TX\_Ch2\_Ant2\_vertikal

Date:	23.02.2021	Page 1 of 1
Test description:	Electric Field Strength Measurement related to 3m distance	
Test site and distance:	Ref.-Nr. 225911, Semi Anechoic Chamber (SAC5) with 3m measurement distance	
Test Location:	CETECOM GmbH Düsseldorf	
Version of Testsoftware:	EMC32 V10.0.0	
Test specification:	FCC15.209 / RSS-Gen Issue 5	
Distance correction:	300/30m to 3m	
Operating Mode:	TX-Mode continuous, Ch2, RF-Path antenna 2	
Technical Data:	Please see page 2 for detailed data of measurement setup	
Used filter:	none up to 3GHz	
Climatic conditions:	%rh: 43, temp: 19.1	
Power during test:	car battery, 12 V DC	
Measured side(s):	front, right, rear, left	
Operator:	Lor	
Comment:	IR-rear glas (AE2) used on car	

Full Spectrum

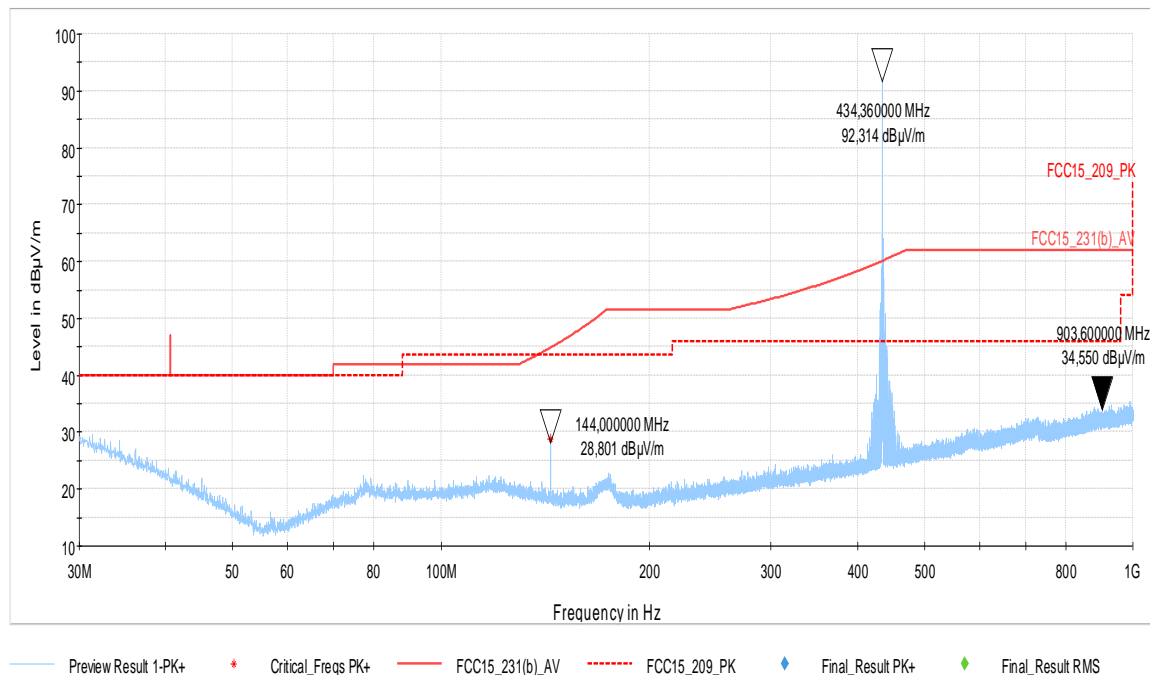


◆ Preview Result 1-PK+ [Preview Result 1.Result:1]

## 1.2 Electrical field strength measurements 30MHz up to 1GHz

### Diagram No. 3.01\_TX\_Ch2\_Ant2

Date:	23.02.2021	Page 1 of 1
Test description:	Electric Field Strength Measurement related to 3m distance	
Test site and distance:	Ref.-Nr. 225911, Semi Anechoic Chamber (SAC5) with 3m measurement distance	
Test Location:	CETECOM GmbH Düsseldorf	
Version of Testsoftware:	EMC32 V10.0.0	
Test specification:	FCC15.209 /15.231/ RSS-210, I10	
Distance correction:	none	
Operating Mode:	TX-Mode continuous, Ch2, RF-Path antenna 2	
Technical Data:	Please see page 2 for detailed data of measurement setup	
Used filter:	none up to 6GHz	
Climatic conditions:	%rh: 43, temp: 19.1	
Power during test:	car battery, 12 V DC	
Measured side(s):	front, right, rear, left	
Operator:	Lor	
Comment:	IR-rear glas (AE2) used on car	
Comment2:	Measurement antenna height: 1 to 3m	



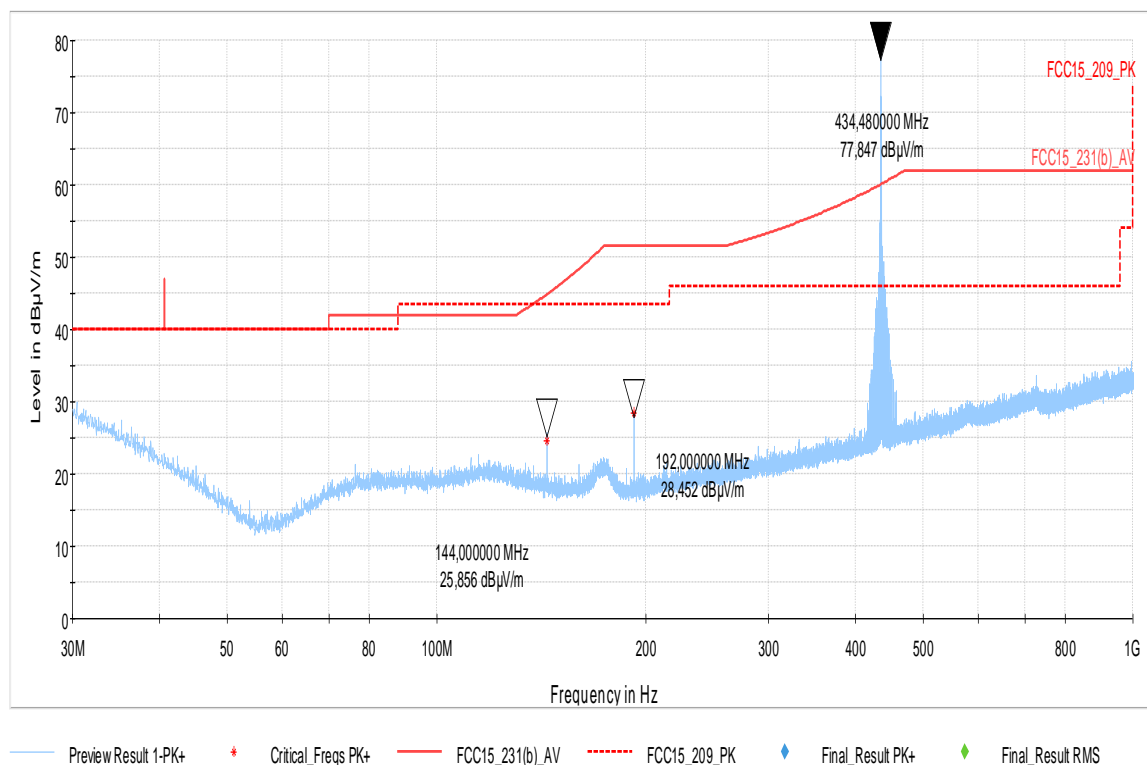
Frequencies at 144MHz and 192MHz generated by AE1.

Fundamental wanted carrier, peak on diagram on 434.36MHz -> not relevant for emission measurement

Measurement performed with Peak detector, in case of EUT generated emissions, average based value is calculated with duty-cycle correction of -17.35dB due timing of transmitter.

## Diagram No. 3.02\_TX\_Ch2\_Ant2

Date:	23.02.2021	Page 1 of 1
Test description:	Electric Field Strength Measurement related to 3m distance	
Test site and distance:	Ref.-Nr. 225911, Semi Anechoic Chamber (SAC5) with 3m measurement distance	
Test Location:	CETECOM GmbH Düsseldorf	
Version of Testsoftware:	EMC32 V10.0.0	
Test specification:	FCC15.209 /15.231/ RSS-210, I10	
Distance correction:	none	
Operating Mode:	TX-Mode continuous, Ch2, RF-Path antenna 2	
Technical Data:	Please see page 2 for detailed data of measurement setup	
Used filter:	none up to 6GHz	
Climatic conditions:	%rh: 43, temp: 19.1	
Power during test:	car battery, 12 V DC	
Measured side(s):	front, right, rear, left	
Operator:	Lor	
Comment:	IR-rear glas (AE2) used on car	
Comment2:	Measurement antenna: height 3 to 4m	



Frequencies at 144MHz and 192MHz generated by AE1.

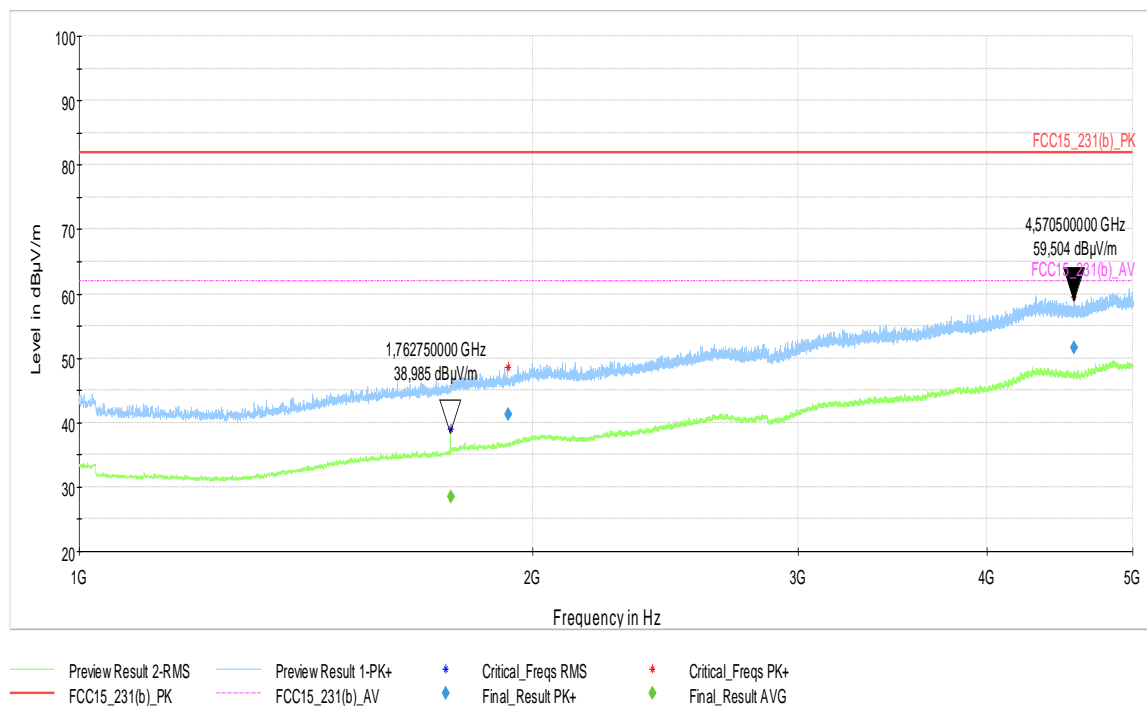
Fundamental wanted carrier, peak on diagram on 434.48MHz -> not relevant for emission measurement

Measurement performed with Peak detector, in case of EUT generated emissions, average based value is calculated with duty-cycle correction of -17.35dB due timing of transmitter.

### 1.3 Electrical field strength measurements 1GHz to 5GHz

## Diagram No. 4.01\_TX\_Ch2\_Ant2

Date:	23.02.2021	Page 1 of 1
Test description:	Electric Field Strength Measurement related to 3m distance	
Test site and distance:	Ref.-Nr. 225911, Semi Anechoic Chamber (SAC5) with 3m measurement distance	
Test Location:	CETECOM GmbH Düsseldorf	
Version of Testsoftware:	EMC32 V10.0.0	
Test specification:	FCC15.209 / 15.231/ RSS-210, I10	
Distance correction:	none	
Operating Mode:	TX-Mode continuous, Ch2, RF-Path antenna 2	
Technical Data:	Please see page 2 for detailed data of measurement setup	
Used filter:	none up to 6GHz	
Climatic conditions:	%rh: 43, temp: 19.1	
Power during test:	car battery, 12 V DC	
Measured side(s):	front, right, rear, left	
Operator:	Lor	
Comment:	IR-rear glas (AE2) used on car	



Measurement performed with Peak and fast average detector, in case of EUT generated emissions, average based value is calculated with duty-cycle correction of -17.35dB due timing of transmitter in 100ms period.

## End Of Annex 1