

TEST REPORT

of

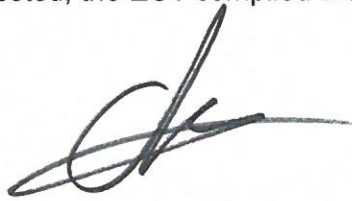
FCC Part 15 Subpart C §15.209

FCC ID : OSLOKA-207W

Equipment Under Test : UNIT ASSY - WIRELESS CHARGING
Model Name : OKA-207W
Variant Model Name : OKA-208W
Applicant : Omron Automotive Electronics Korea Co., Ltd.
Manufacturer : Omron Automotive Electronics Korea Co., Ltd.
Date of Receipt : 2017.09.21
Date of Test(s) : 2017.10.10 ~ 2017.11.01
Date of Issue : 2017.11.16

In the configuration tested, the EUT complied with the standards specified above.

Tested By:



Jinhyoung Cho

Date:

2017.11.16

Technical
Manager:



Harim Lee

Date:

2017.11.16

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1. General information

1.1. Testing laboratory

SGS Korea Co., Ltd. (Gunpo Laboratory)

- Wireless Div. 2FL, 10-2, LS-ro 182beon-gil, Gunpo-si, Gyeonggi-do, Korea, 15807

All SGS services are rendered in accordance with the applicable SGS conditions of service available on request and accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>.

Phone No. : +82 31 688 0901

Fax No. : +82 31 688 0921

1.2. Details of applicant

Applicant : Omron Automotive Electronics Korea Co., Ltd.

Address : 790-12, Bogaewonsam-ro, Bogae-myeon, Anseong-si, Gyeonggi-do, Korea

Contact Person : Nam, Sang-Il

Phone No. : +82 2 850 5789

1.3. Details of manufacturer

Company : Omron Automotive Electronics Korea Co., Ltd.

Address : 790-12, Bogaewonsam-ro, Bogae-myeon, Anseong-si, Gyeonggi-do, Korea

1.4. Description of EUT

| | |
|---------------------------|------------------------------|
| Kind of Product | UNIT ASSY - WIRELESS CHARGER |
| Model Name | OKA-207W |
| Variant Model Name | OKA-208W |
| Power Supply | DC 12.0 V |
| Frequency Range | 112.5 kHz |
| Antenna Type | Inductive loop coil antenna |

1.5. Information of Variant model

| Model Name | Information |
|-------------------|---|
| OKA-207W | Basic Model |
| OKA-208W | Same to basic model, , but it is different exterior |

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1.6. Test Equipment List

| Equipment | Manufacturer | Model | S/N | Cal. Date | Cal. Interval | Cal. Due |
|-------------------|-----------------------------|-----------------------------------|------------------------|---------------|---------------|---------------|
| Spectrum Analyzer | R&S | FSV30 | 100768 | Mar. 20, 2017 | Annual | Mar. 20, 2018 |
| Signal Generator | R&S | SMBV100A | 255834 | Jun. 15, 2017 | Annual | Jun. 15, 2018 |
| DC Power Supply | R&S | HMP2020 | 019922876 | Apr. 26, 2017 | Annual | Apr. 26, 2018 |
| Test Receiver | R&S | ESU26 | 100109 | Feb. 17, 2017 | Annual | Feb. 17, 2018 |
| Loop Antenna | Schwarzbeck Mess-Elektronik | FMZB 1519 | 1519-039 | Aug. 23, 2017 | Biennial | Aug. 23, 2019 |
| Turn Table | Innco systems GmbH | DS 1200 S | N/A | N.C.R. | N/A | N.C.R. |
| Controller | Innco systems GmbH | CONTROLLER CO3000-4P | CO3000/963/3 8330516/L | N. C. R. | N/A | N.C.R. |
| Anechoic Chamber | SY Corporation | L x W x H (9.6 m x 6.4 m x 6.6 m) | N/A | N.C.R. | N/A | N.C.R. |
| Coxial Cable | SUCOFLEX | 104 (3m) | MY3258414 | N.C.R. | N/A | N.C.R. |
| Coxial Cable | SUCOFLEX | 104 (10m) | MY3145814 | N.C.R. | N/A | N.C.R. |

► Support equipment

| Description | Manufacturer | Model | FCC ID |
|----------------------|-------------------------------|----------|-------------|
| Samsung Mobile Phone | Samsung Electronics Co., Ltd. | SM-G900L | R39F50BBXDK |

1.7. Sample calculation

Where relevant, the following sample calculation is provided:

Field strength level (dB μ V/m) = Measured level (dB μ V) + Antenna factor (dB) + Cable loss (dB)

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1.8. Worst case of test configurations

In order to check all kinds of possible configurations, EUT was evaluated with appropriate client and under each charging condition as below table.

| EUT configuration | Description |
|--|--------------------------------|
| Charging Mode with client device (Model : SM-G900L, FCC ID : R39F50BBXDK) | Less than 1 % of battery |
| | Less than 50 % of battery |
| | 100 % full charging of battery |

1.9. Summary of Test Results

The EUT has been tested according to the following specifications:

| APPLIED STANDARD: FCC Part 15 Subpart C §15.209 | | |
|---|--|----------|
| Section in FCC Part 15 Subpart C | Test Item | Result |
| 15.209 | Radiated emission, Spurious Emission and Field Strength of Fundamental | Complied |
| 2.1049 | 20 dB Bandwidth | Complied |

1.10. Test Report Revision

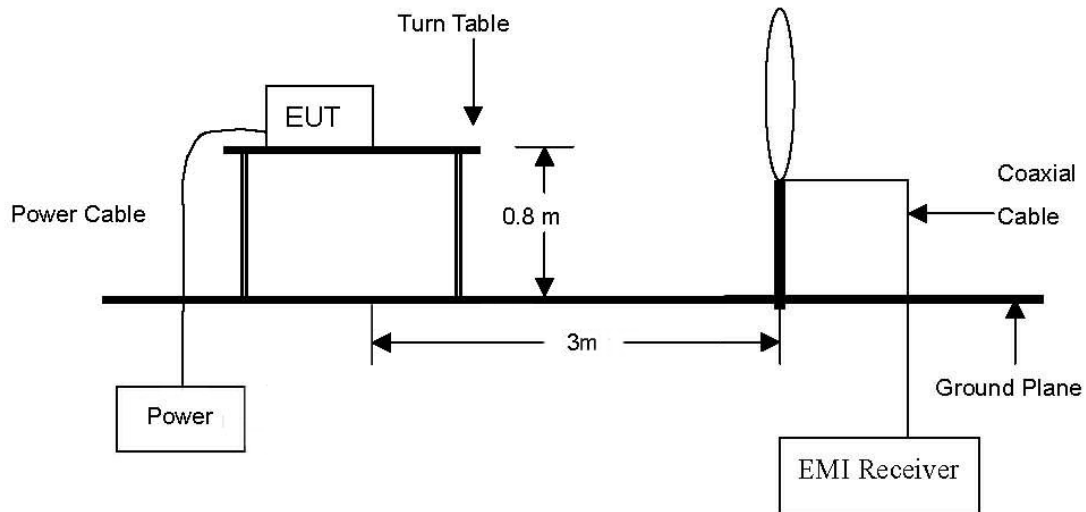
| Revision | Report number | Date of Issue | Description |
|----------|------------------------|---------------|--|
| 0 | F690501/RF-RTL011985 | 2017.11.10 | Initial |
| 1 | F690501/RF-RTL011985-1 | 2017.11.16 | Listed coaxial cable in the equipment list |

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2. Field Strength of Fundamental and Spurious Emission

2.1. Test Setup

The diagram below shows the test setup that is utilized to make the measurements for emission from 9 kHz to 30 MHz.



2.2. Limit

2.2.1. Radiated emission limits, general requirements

According to §15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

| Frequency (MHz) | Field Strength (microvolts/meter) | Measurement Distance (meter) |
|-----------------|-----------------------------------|------------------------------|
| 0.009 - 0.490 | 2 400/F(kHz) | 300 |
| 0.490 - 1.705 | 24 000/F(kHz) | 30 |
| 1.705 - 30.0 | 30 | 30 |
| 30 - 88 | 100** | 3 |
| 88 - 216 | 150** | 3 |
| 216 - 960 | 200** | 3 |
| Above 960 | 500 | 3 |

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections §15.231 and §15.241

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2.3. Test Procedures

Radiated emissions from the EUT were measured according to the dictates of ANSI C63.10:2013.

2.3.1. Test Procedures for emission from 9 kHz to 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter anechoic chamber test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. Then antenna is a loop antenna is fixed at one meter above the ground to determine the maximum value of the field strength. Both parallel and perpendicular of the antenna are set to make the measurement.
- c. For each suspected emission, the EUT was arranged to its worst case and then the table was turned from 0 degrees to 360 degrees to find the maximum reading.
- d. The test-receiver system was set to Quasi and Average Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note;

Although these tests were performed other than open field test site, adequate comparison measurements were confirmed against 30 meter open field test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788 D01 v01.

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2.4. Field Strength of Fundamental Test Result

Ambient temperature : (23 ± 1) °C
 Relative humidity : 47 % R.H.

The following table shows the highest levels of radiated emissions on both polarizations of horizontal and vertical. The field strength of spurious emission was measured in one orthogonal EUT position (X-axis).

Test Condition: Ant. 1

| Radiated Emissions | | | Ant. | Correction Factors | | Total | | Limit | |
|---|----------------------|-------------|------|--------------------|------------|------------------------------|--------------------------------|-------------------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | Ant. (dB/m) | Cable (dB) | Actual (dB μ V/m) at 3 m | Actual (dB μ V/m) at 300 m | Limit (dB μ V/m) at 300 m | Margin (dB) |
| Charging mode with client (less than 1 % battery status) | | | | | | | | | |
| 0.112 5 | 69.80 | Average | H | 19.69 | 0.04 | 89.53 | 9.53 | 26.58 | 17.05 |
| Charging mode with client (less than 50 % battery status) | | | | | | | | | |
| 0.112 5 | 69.60 | Average | H | 19.69 | 0.04 | 89.33 | 9.33 | 26.58 | 17.25 |
| Charging mode with client (100 % battery status) | | | | | | | | | |
| 0.112 5 | 70.00 | Average | H | 19.69 | 0.04 | 89.73 | 9.73 | 26.58 | 16.85 |

Test Condition: Ant. 2

| Radiated Emissions | | | Ant. | Correction Factors | | Total | | Limit | |
|---|----------------------|-------------|------|--------------------|------------|------------------------------|--------------------------------|-------------------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | Ant. (dB/m) | Cable (dB) | Actual (dB μ V/m) at 3 m | Actual (dB μ V/m) at 300 m | Limit (dB μ V/m) at 300 m | Margin (dB) |
| Charging mode with client (less than 1 % battery status) | | | | | | | | | |
| 0.112 5 | 68.80 | Average | H | 19.69 | 0.04 | 88.53 | 8.53 | 26.58 | 18.05 |
| Charging mode with client (less than 50 % battery status) | | | | | | | | | |
| 0.112 5 | 66.30 | Average | H | 19.69 | 0.04 | 86.03 | 6.03 | 26.58 | 20.55 |
| Charging mode with client (100 % battery status) | | | | | | | | | |
| 0.112 5 | 66.40 | Average | H | 19.69 | 0.04 | 86.13 | 6.13 | 26.58 | 20.45 |

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Test Condition: Ant. 3

| Radiated Emissions | | | Ant. | Correction Factors | | Total | | Limit | |
|---|----------------------|-------------|------|--------------------|------------|------------------------------|--------------------------------|-------------------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | Ant. (dB/m) | Cable (dB) | Actual (dB μ V/m) at 3 m | Actual (dB μ V/m) at 300 m | Limit (dB μ V/m) at 300 m | Margin (dB) |
| Charging mode with client (less than 1 % battery status) | | | | | | | | | |
| 0.112 5 | 67.60 | Average | H | 19.69 | 0.04 | 87.33 | 7.33 | 26.58 | 19.25 |
| Charging mode with client (less than 50 % battery status) | | | | | | | | | |
| 0.112 5 | 67.70 | Average | H | 19.69 | 0.04 | 87.43 | 7.43 | 26.58 | 19.15 |
| Charging mode with client (100 % battery status) | | | | | | | | | |
| 0.112 5 | 67.90 | Average | H | 19.69 | 0.04 | 87.63 | 7.63 | 26.58 | 18.95 |

Note;

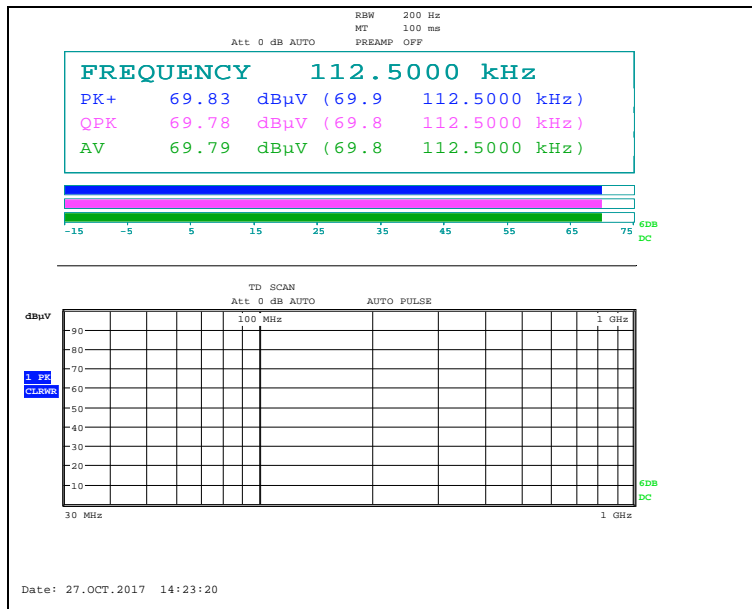
1. According to §15.31 (f)(2) 300 m Result (dB μ V/m) = 3 m Result (dB μ V/m) - 40log(300/3) (dB μ V/m).
2. According to §15.209 (d), the measurements were tested by using Quasi peak detector except for the frequency bands 9 – 90 kHz, 110 – 490 kHz and above 1 GHz in these three bands on measurements employing an average detector.
3. The limit above was calculated based on table of §15.209 (a).

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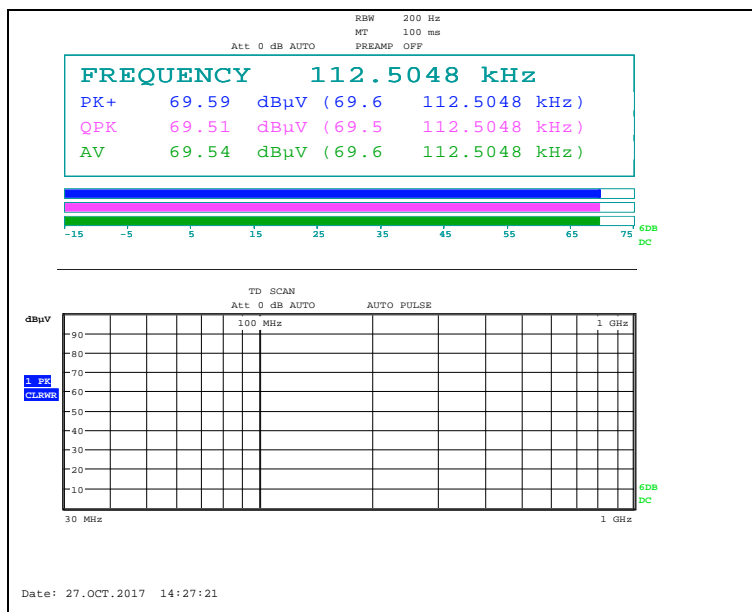
Test plots

Test Condition: Ant. 1

Charging mode (less than 1 % battery status of client device)

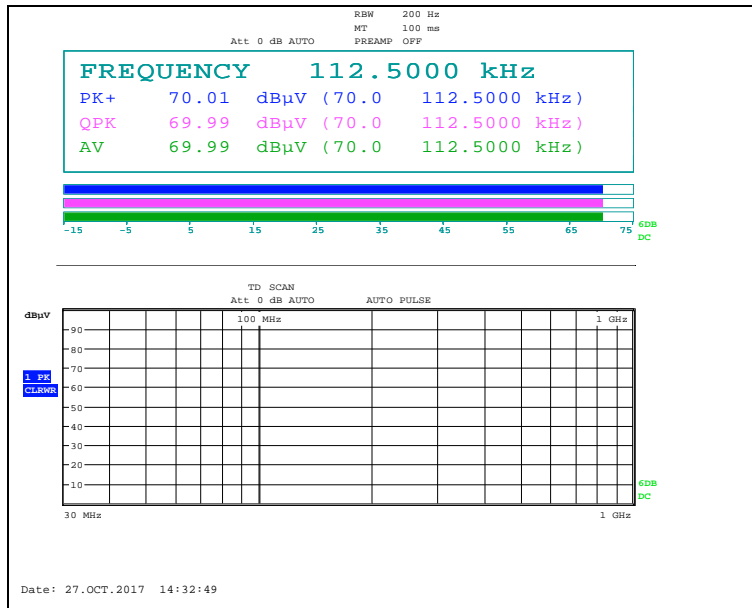


Charging mode (less than 50 % battery status of client device)



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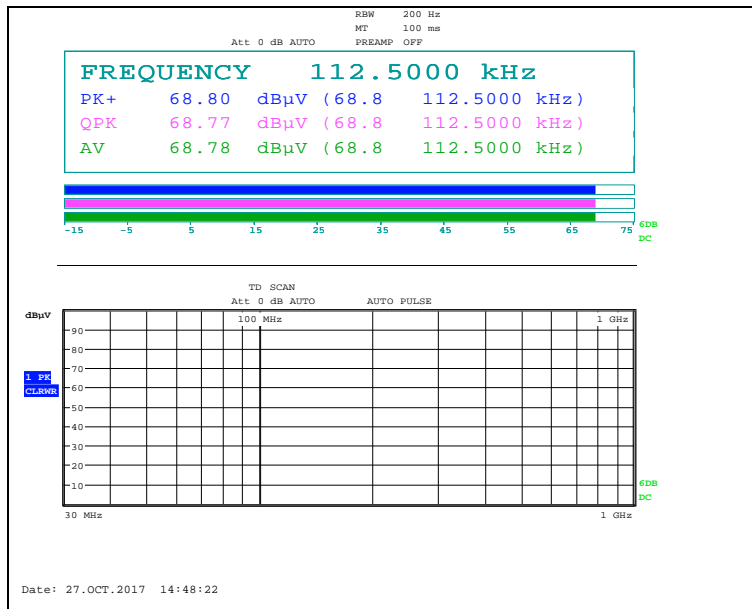
Charging mode (100 % battery status of client device)



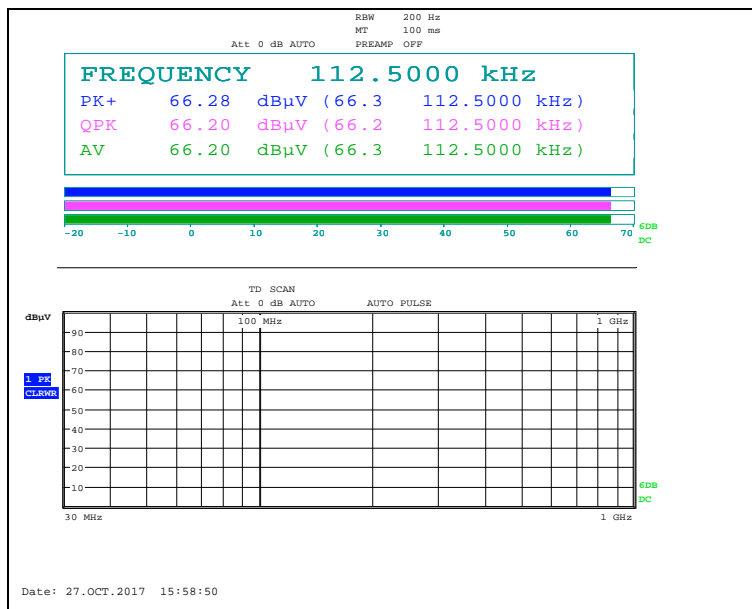
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Test Condition: Ant. 2

Charging mode (less than 1 % battery status of client device)

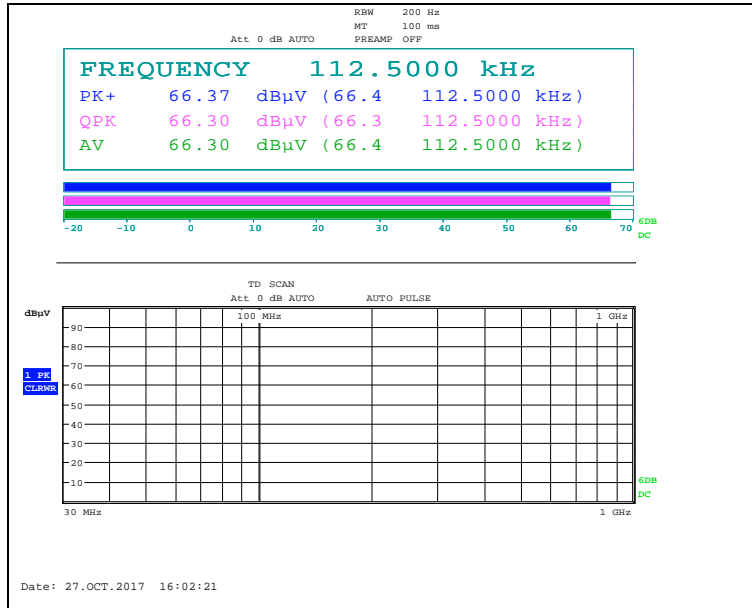


Charging mode (less than 50 % battery status of client device)



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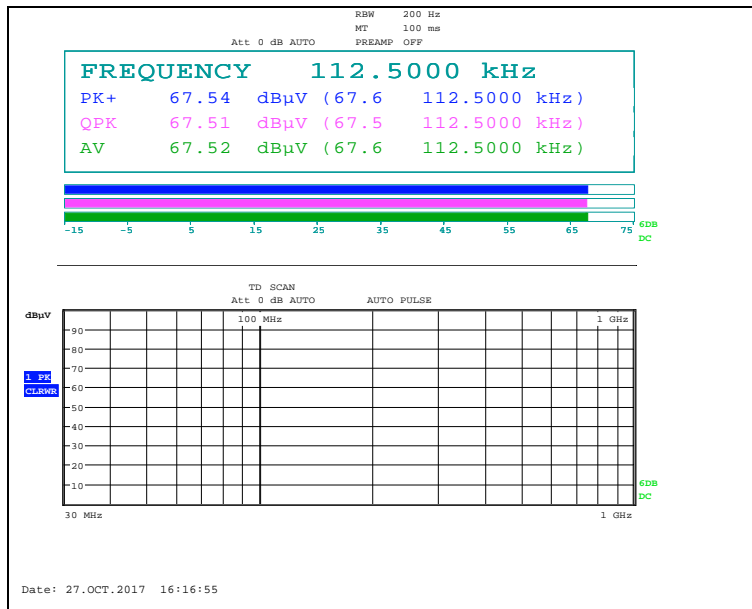
Charging mode (100 % battery status of client device)



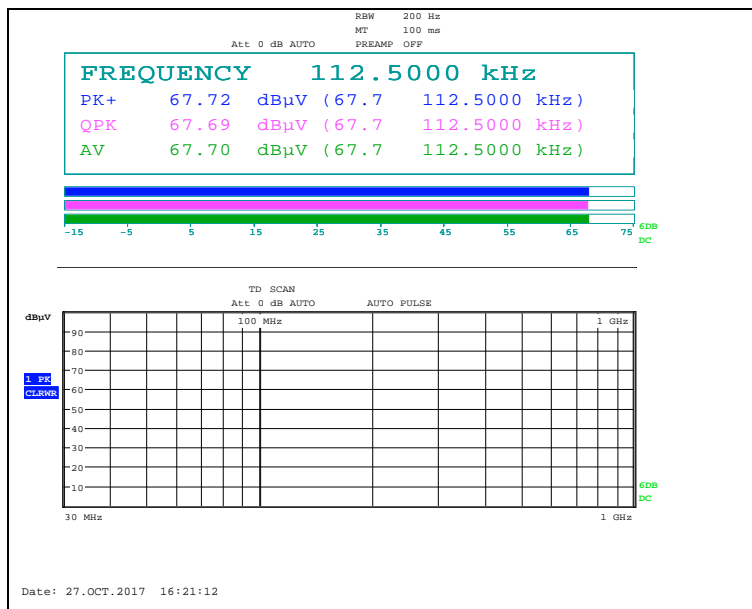
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Test Condition: Ant. 3

Charging mode (less than 1 % battery status of client device)

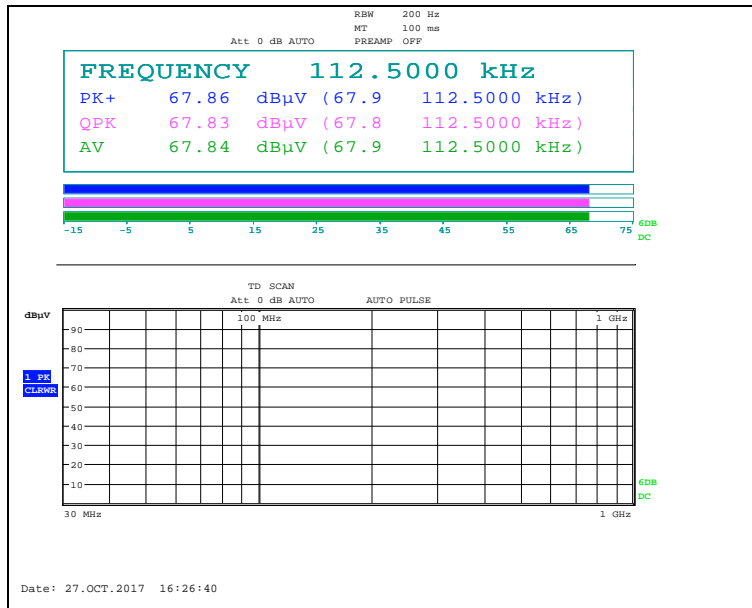


Charging mode (less than 50 % battery status of client device)



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Charging mode (100 % battery status of client device)



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2.5. Spurious Emission Test Result

Ambient temperature : (23 ± 1) °C
 Relative humidity : 47 % R.H.

The following table shows the highest levels of radiated emissions on both polarizations of horizontal and vertical.

Test Condition: Ant. 1

Charging mode with client device (less than 1 % battery status of client device)

-Spurious

| Radiated Emissions | | | Ant. | Correction Factors | | Total | | Limit | |
|--------------------|----------------------|-------------|------|--------------------|------------|------------------------------|--|---------------------------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | Ant. (dB/m) | Cable (dB) | Actual (dB μ V/m) at 3 m | Actual (dB μ V/m) at 300 m or 30 m | Limit (dB μ V/m) at 300 m or 30 m | Margin (dB) |
| 0.068 | 26.00 | Average | H | 19.75 | 0.02 | 45.77 | -34.23 | 30.95 | 65.18 |
| 0.136 | 15.50 | Average | H | 19.68 | 0.06 | 35.24 | -44.76 | 24.93 | 69.69 |
| 0.338 | 38.10 | Average | H | 19.60 | 0.10 | 57.80 | -22.20 | 17.03 | 39.23 |
| 0.562 | 27.40 | Quasi Peak | H | 19.61 | 0.10 | 47.11 | 7.11 | 32.61 | 25.50 |
| Above 0.600 | Not detected | - | - | - | - | - | - | - | - |

Charging mode with client device (less than 50 % battery status of client device)

-Spurious

| Radiated Emissions | | | Ant. | Correction Factors | | Total | | Limit | |
|--------------------|----------------------|-------------|------|--------------------|------------|------------------------------|--|---------------------------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | Ant. (dB/m) | Cable (dB) | Actual (dB μ V/m) at 3 m | Actual (dB μ V/m) at 300 m or 30 m | Limit (dB μ V/m) at 300 m or 30 m | Margin (dB) |
| 0.067 | 25.70 | Average | H | 19.75 | 0.02 | 45.47 | -34.53 | 31.08 | 65.61 |
| 0.136 | 14.90 | Average | H | 19.68 | 0.06 | 34.64 | -45.36 | 24.93 | 70.29 |
| 0.338 | 35.80 | Average | H | 19.60 | 0.10 | 55.50 | -24.50 | 17.03 | 41.53 |
| 0.561 | 27.10 | Quasi Peak | H | 19.61 | 0.10 | 46.81 | 6.81 | 32.62 | 25.81 |
| Above 0.600 | Not detected | - | - | - | - | - | - | - | - |

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Charging mode with client device (100 % battery status of client device)
-Spurious

| Radiated Emissions | | | Ant. | Correction Factors | | Total | | Limit | |
|--------------------|----------------------|-------------|------|--------------------|------------|------------------------------|--|--|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | Ant. (dB/m) | Cable (dB) | Actual (dB μ V/m) at 3 m | Actual (dB μ V/m) at 300 m or 30 m | Actual (dB μ V/m) at 300 m or 30 m | Margin (dB) |
| 0.069 | 27.70 | Average | H | 19.74 | 0.02 | 47.46 | -32.54 | 30.83 | 63.37 |
| 0.136 | 14.00 | Average | H | 19.68 | 0.06 | 33.74 | -46.26 | 24.93 | 71.19 |
| 0.338 | 37.20 | Average | H | 19.60 | 0.10 | 56.90 | -23.10 | 17.03 | 40.13 |
| 0.563 | 19.70 | Quasi Peak | H | 19.61 | 0.10 | 39.41 | -0.59 | 32.59 | 33.18 |
| Above 0.600 | Not detected | - | - | - | - | - | - | - | - |

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Test Condition: Ant. 2
Charging mode with client device (less than 1 % battery status of client device)
-Spurious

| Radiated Emissions | | | Ant. | Correction Factors | | Total | | Limit | |
|--------------------|----------------------|-------------|------|--------------------|------------|------------------------------|--|---------------------------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | Ant. (dB/m) | Cable (dB) | Actual (dB μ V/m) at 3 m | Actual (dB μ V/m) at 300 m or 30 m | Limit (dB μ V/m) at 300 m or 30 m | Margin (dB) |
| 0.068 | 25.50 | Average | H | 19.75 | 0.02 | 45.27 | -34.73 | 30.95 | 65.68 |
| 0.136 | 13.80 | Average | H | 19.68 | 0.06 | 33.54 | -46.46 | 24.93 | 71.39 |
| 0.338 | 36.70 | Average | H | 19.60 | 0.10 | 56.40 | -23.60 | 17.03 | 40.63 |

Charging mode with client device (less than 50 % battery status of client device)
-Spurious

| Radiated Emissions | | | Ant. | Correction Factors | | Total | | Limit | |
|--------------------|----------------------|-------------|------|--------------------|------------|------------------------------|--|---------------------------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | Ant. (dB/m) | Cable (dB) | Actual (dB μ V/m) at 3 m | Actual (dB μ V/m) at 300 m or 30 m | Limit (dB μ V/m) at 300 m or 30 m | Margin (dB) |
| 0.068 | 25.10 | Average | H | 19.75 | 0.02 | 44.87 | -35.13 | 30.95 | 66.08 |
| 0.136 | 15.90 | Average | H | 19.68 | 0.06 | 35.64 | -44.36 | 24.93 | 69.29 |
| 0.338 | 36.70 | Average | H | 19.60 | 0.10 | 56.40 | -23.60 | 17.03 | 40.63 |

Charging mode with client device (100 % battery status of client device)
-Spurious

| Radiated Emissions | | | Ant. | Correction Factors | | Total | | Limit | |
|--------------------|----------------------|-------------|------|--------------------|------------|------------------------------|--|--|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | Ant. (dB/m) | Cable (dB) | Actual (dB μ V/m) at 3 m | Actual (dB μ V/m) at 300 m or 30 m | Actual (dB μ V/m) at 300 m or 30 m | Margin (dB) |
| 0.068 | 25.90 | Average | H | 19.75 | 0.02 | 45.67 | -34.33 | 30.95 | 65.28 |
| 0.136 | 15.30 | Average | H | 19.68 | 0.06 | 35.04 | -44.96 | 24.93 | 69.89 |
| 0.337 | 36.90 | Average | H | 19.60 | 0.10 | 56.60 | -23.40 | 17.05 | 40.45 |

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Test Condition: Ant. 3
Charging mode with client device (less than 1 % battery status of client device)
-Spurious

| Radiated Emissions | | | Ant. | Correction Factors | | Total | | Limit | |
|--------------------|----------------------|-------------|------|--------------------|------------|------------------------------|--|---------------------------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | Ant. (dB/m) | Cable (dB) | Actual (dB μ V/m) at 3 m | Actual (dB μ V/m) at 300 m or 30 m | Limit (dB μ V/m) at 300 m or 30 m | Margin (dB) |
| 0.068 | 26.00 | Average | H | 19.75 | 0.02 | 45.77 | -34.23 | 30.95 | 65.18 |
| 0.136 | 15.90 | Average | H | 19.68 | 0.06 | 35.64 | -44.36 | 24.93 | 69.29 |
| 0.337 | 37.20 | Average | H | 19.60 | 0.10 | 56.90 | -23.10 | 17.05 | 40.15 |
| 0.561 | 23.10 | Quasi Peak | H | 19.61 | 0.10 | 42.81 | 2.81 | 32.62 | 29.81 |
| Above 0.600 | Not detected | - | - | - | - | - | - | - | - |

Charging mode with client device (less than 50 % battery status of client device)
-Spurious

| Radiated Emissions | | | Ant. | Correction Factors | | Total | | Limit | |
|--------------------|----------------------|-------------|------|--------------------|------------|------------------------------|--|---------------------------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | Ant. (dB/m) | Cable (dB) | Actual (dB μ V/m) at 3 m | Actual (dB μ V/m) at 300 m or 30 m | Limit (dB μ V/m) at 300 m or 30 m | Margin (dB) |
| 0.068 | 26.10 | Average | H | 19.75 | 0.02 | 45.87 | -34.13 | 30.95 | 65.08 |
| 0.137 | 13.70 | Average | H | 19.68 | 0.06 | 33.44 | -46.56 | 24.87 | 71.43 |
| 0.339 | 34.80 | Average | H | 19.60 | 0.10 | 54.50 | -25.50 | 17.00 | 42.50 |
| 0.561 | 20.70 | Quasi Peak | H | 19.61 | 0.10 | 40.41 | 0.41 | 32.62 | 32.21 |
| Above 0.600 | Not detected | - | - | - | - | - | - | - | - |

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Charging mode with client device (100 % battery status of client device)
-Spurious

| Radiated Emissions | | | Ant. | Correction Factors | | Total | | Limit | |
|--------------------|----------------------|-------------|------|--------------------|------------|------------------------------|--|--|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | Ant. (dB/m) | Cable (dB) | Actual (dB μ V/m) at 3 m | Actual (dB μ V/m) at 300 m or 30 m | Actual (dB μ V/m) at 300 m or 30 m | Margin (dB) |
| 0.068 | 25.90 | Average | H | 19.75 | 0.02 | 45.67 | -34.33 | 30.95 | 65.28 |
| 0.137 | 16.50 | Average | H | 19.68 | 0.06 | 36.24 | -43.76 | 24.87 | 68.63 |
| 0.338 | 36.10 | Average | H | 19.60 | 0.10 | 55.80 | -24.20 | 17.03 | 41.23 |
| 0.561 | 21.50 | Quasi Peak | H | 19.61 | 0.10 | 41.21 | 1.21 | 32.62 | 31.41 |
| Above 0.600 | Not detected | - | - | - | - | - | - | - | - |

Note;

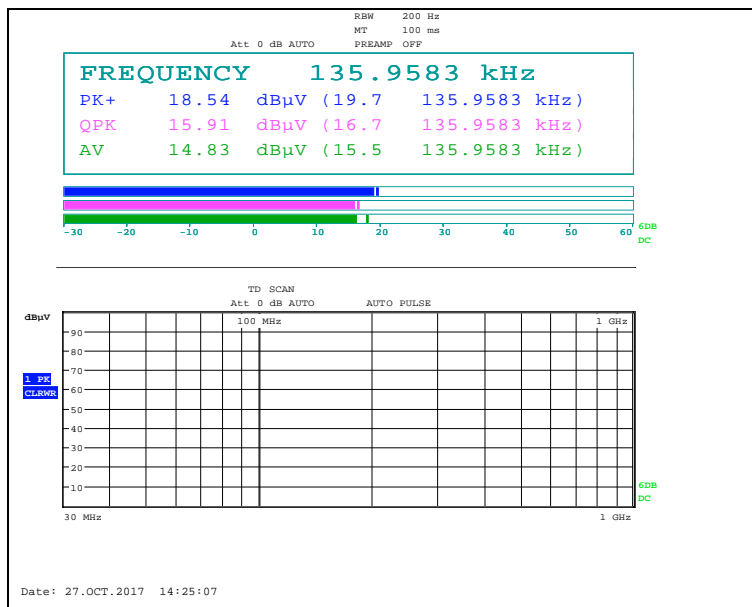
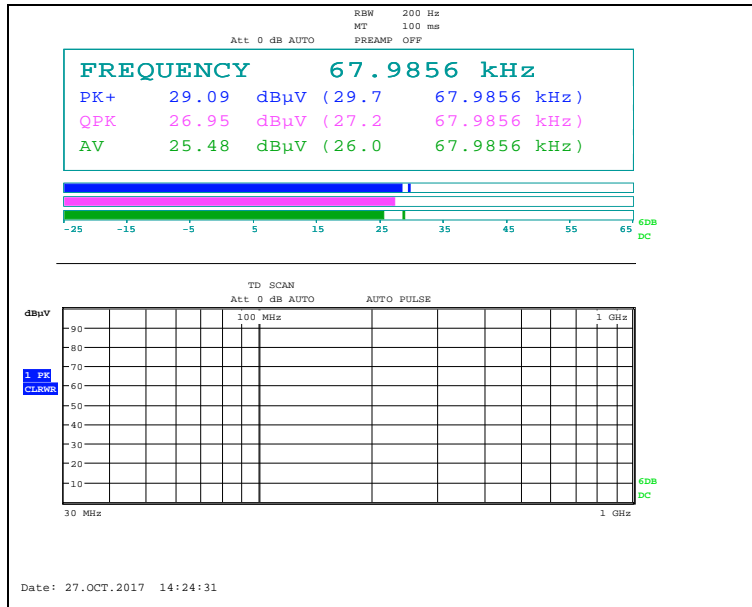
- According to §15.31 (f)(2)
 - 300 m Result (dB μ V/m) = 3 m Result (dB μ V/m) - 40log(300/3) (dB μ V/m)
 - 30 m Result (dB μ V/m) = 3 m Result (dB μ V/m) - 40log(30/3) (dB μ V/m)
- According to field strength table of general requirement in §15.209 (a), field strength limits below 1.705 MHz were calculated as below.
 - 9 kHz to 490 kHz : 20log(2 400 / F (kHz)) at 300 m (dB μ V/m)
 - 490 kHz to 1.705 MHz : 20log (24 000 / F (kHz)) at 30 m (dB μ V/m)
- According to §15.209 (d), the measurements were tested by using Quasi peak detector except for the frequency bands 9 – 90 kHz, 110 – 490 kHz and above 1 GHz in these three bands on measurements employing an average detector.

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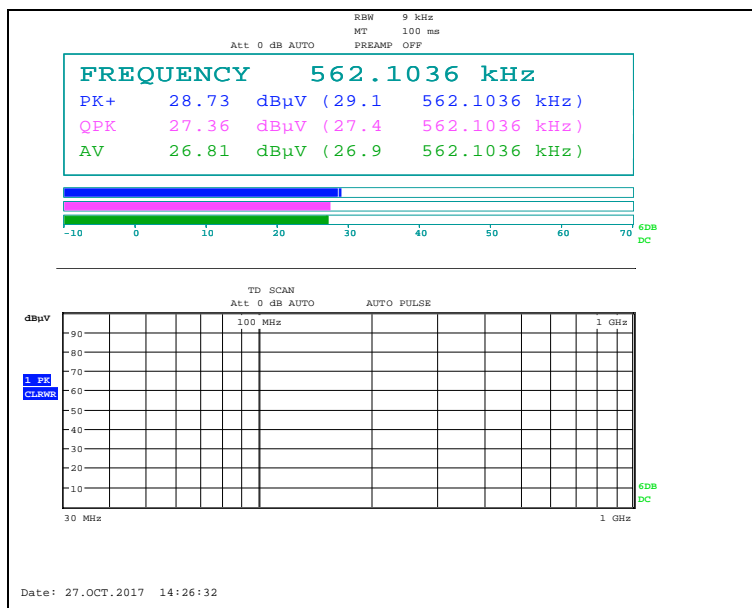
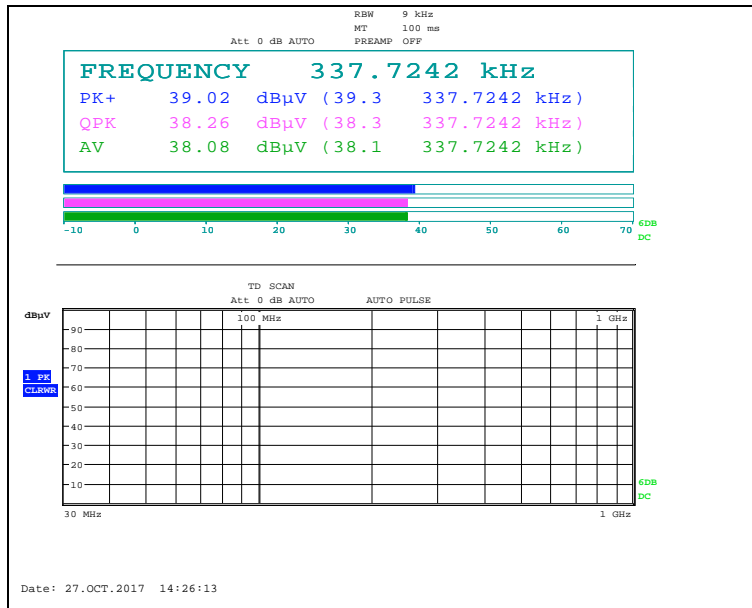
Test Condition: Ant. 1

Test plots

Charging mode (less than 1 % battery status of client device)

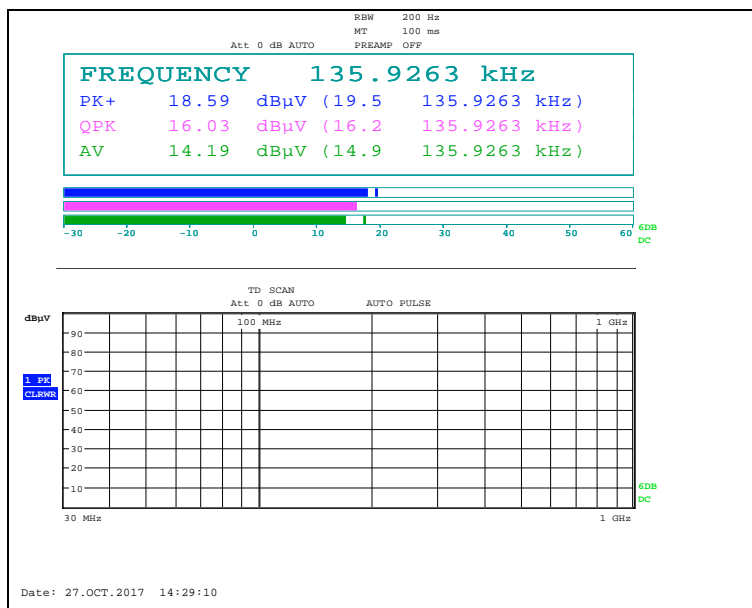
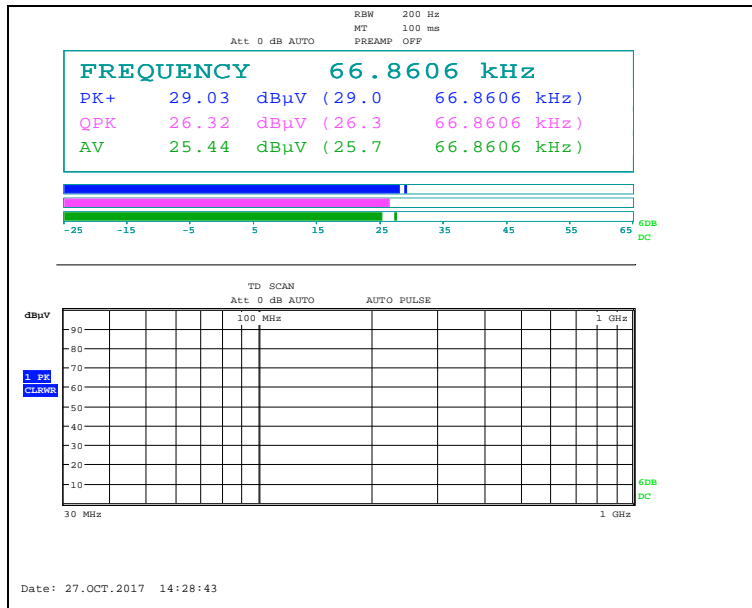


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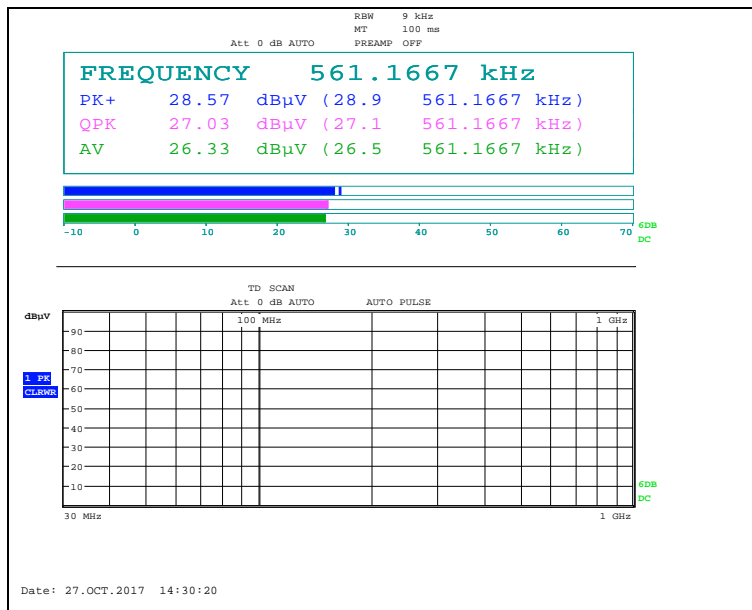
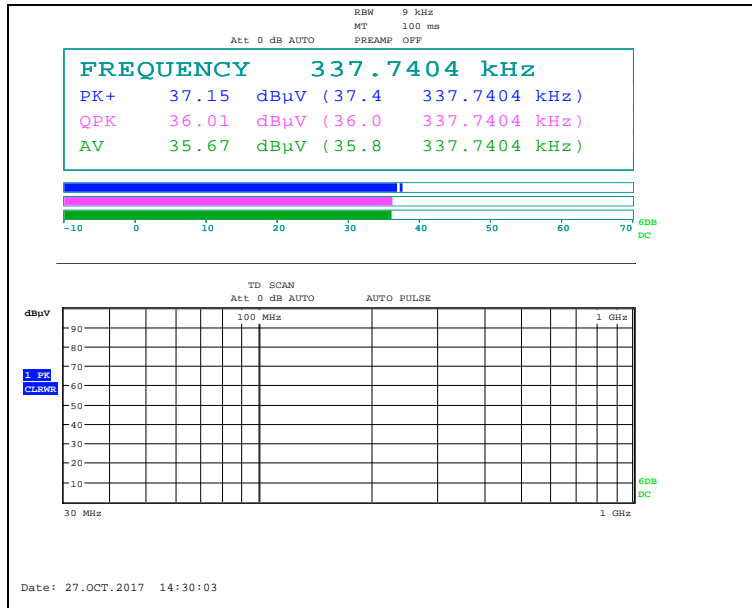


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Charging mode (less than 50 % battery status of client device)

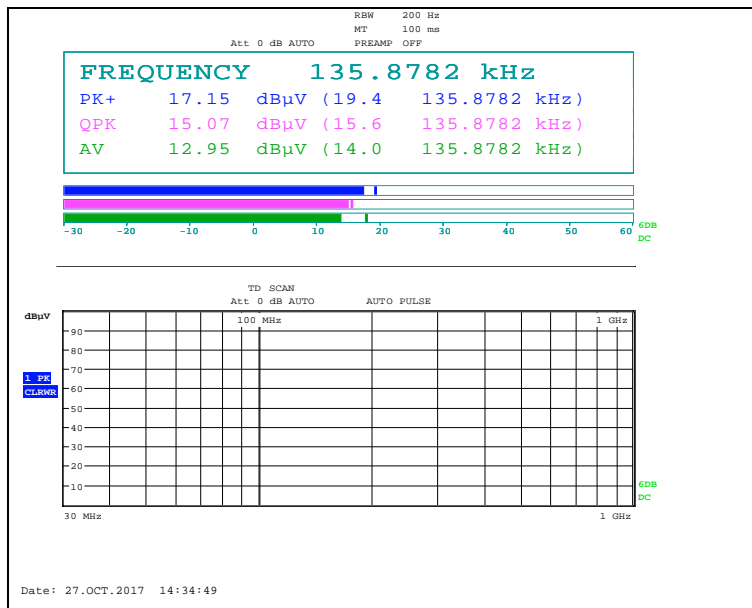
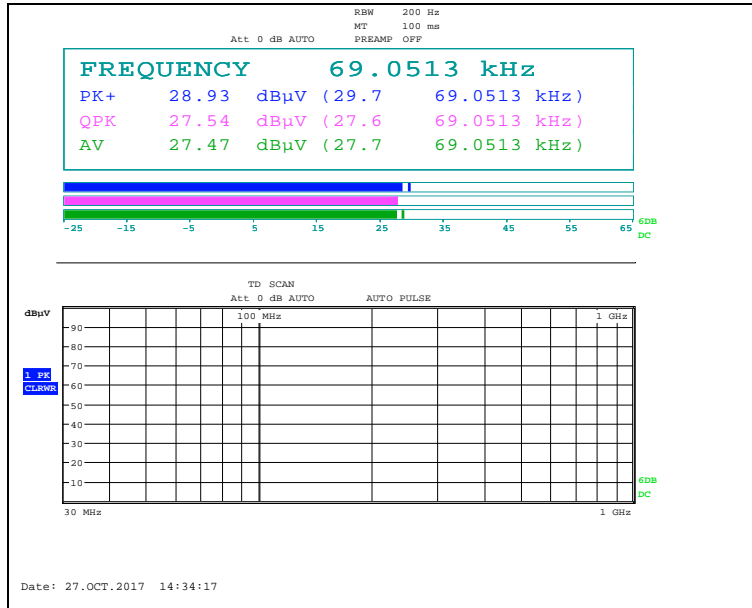


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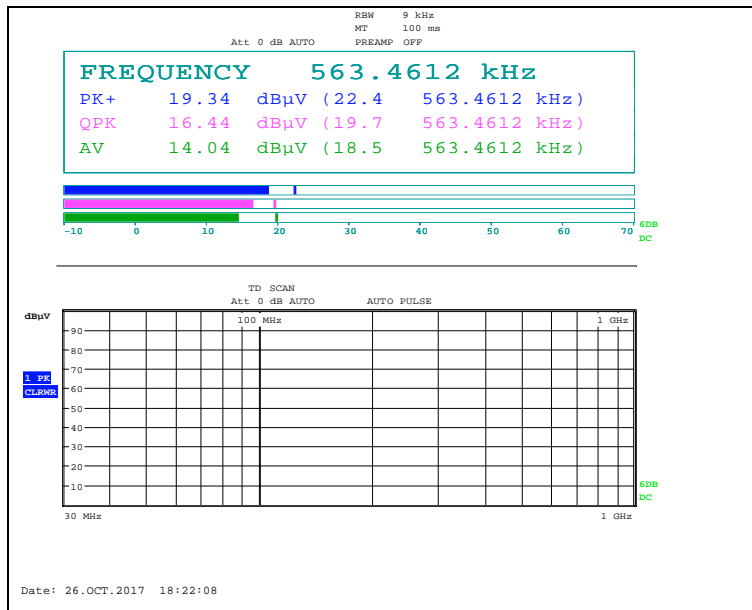
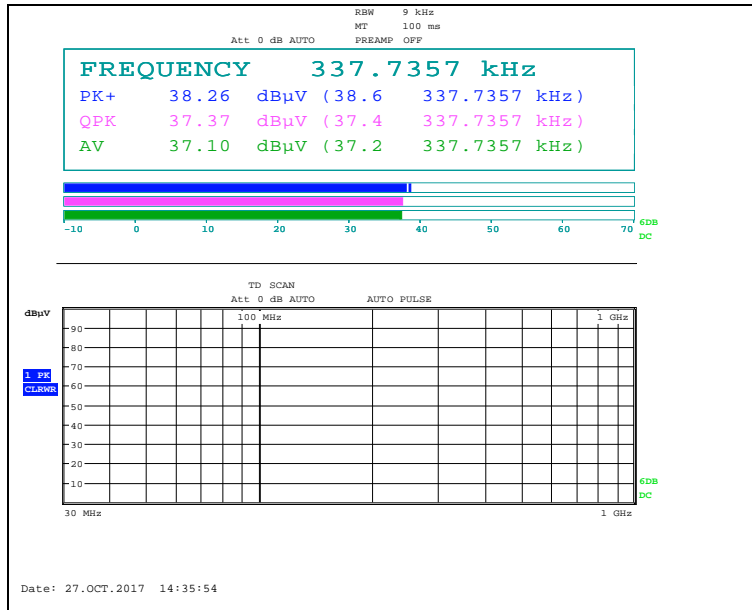


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Charging mode (100 % battery status of client device)



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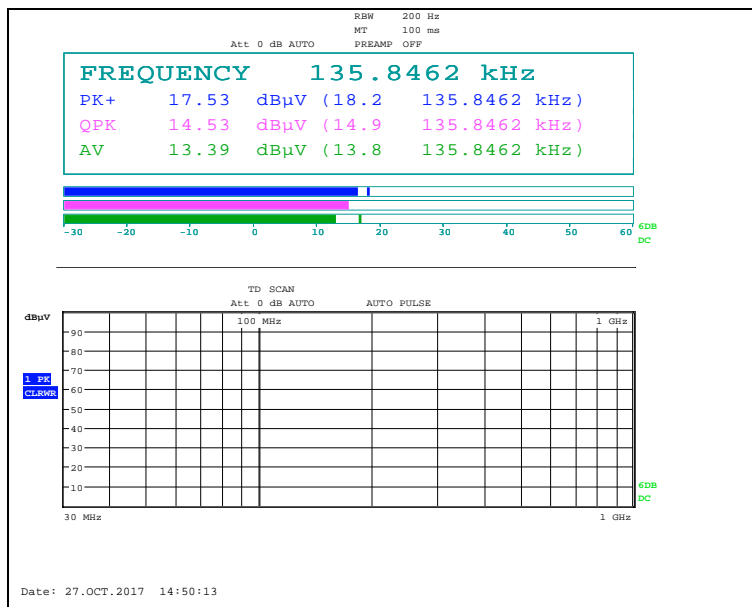
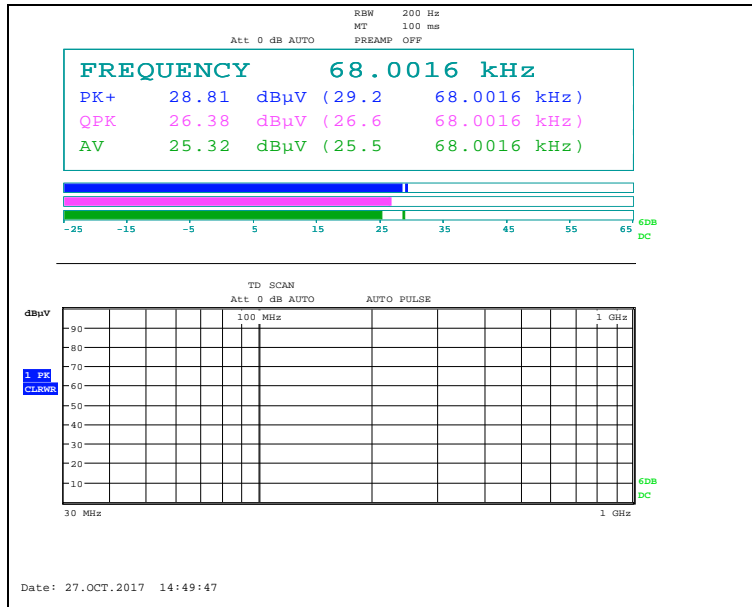


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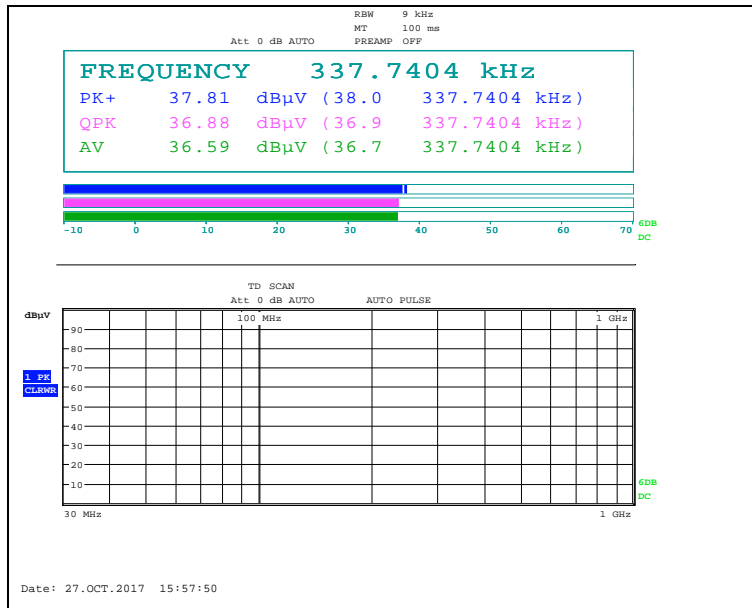
Test Condition: Ant. 2

Test plots

Charging mode (less than 1 % battery status of client device)

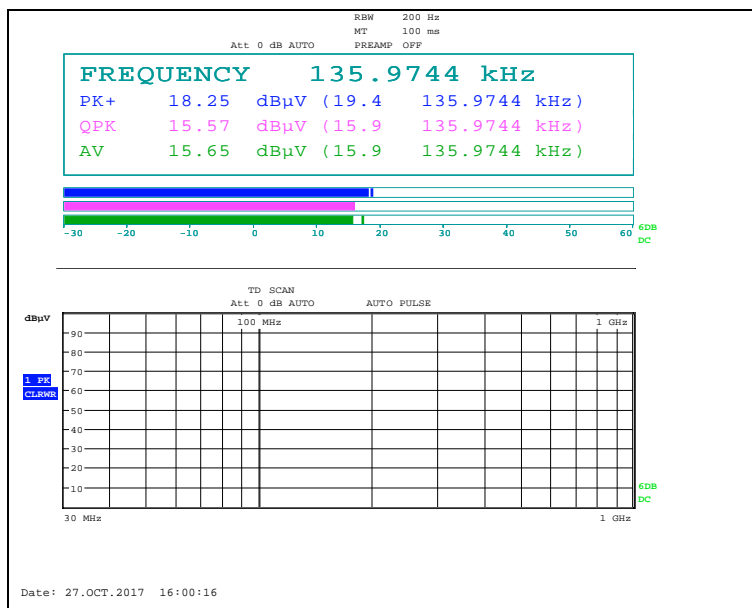
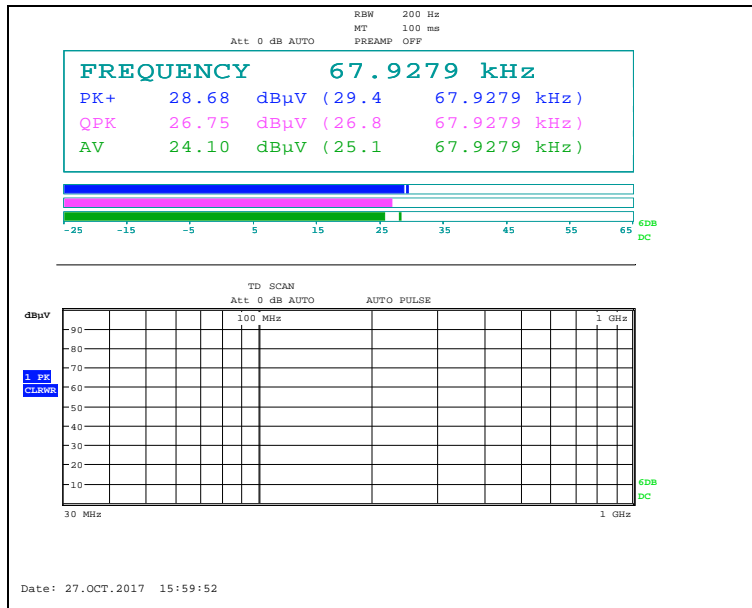


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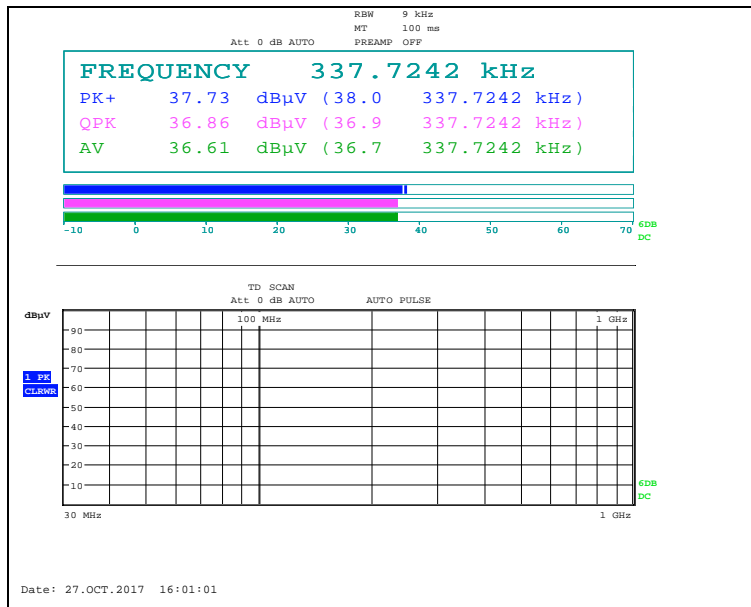


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Charging mode (less than 50 % battery status of client device)

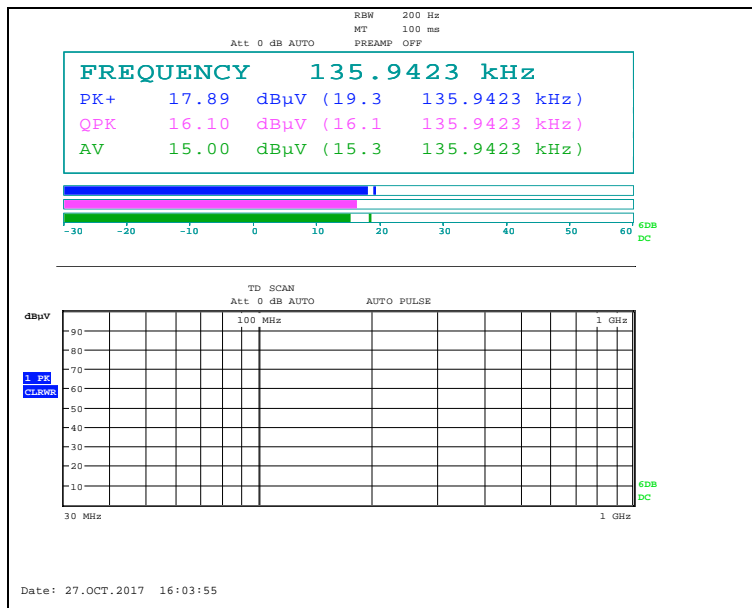
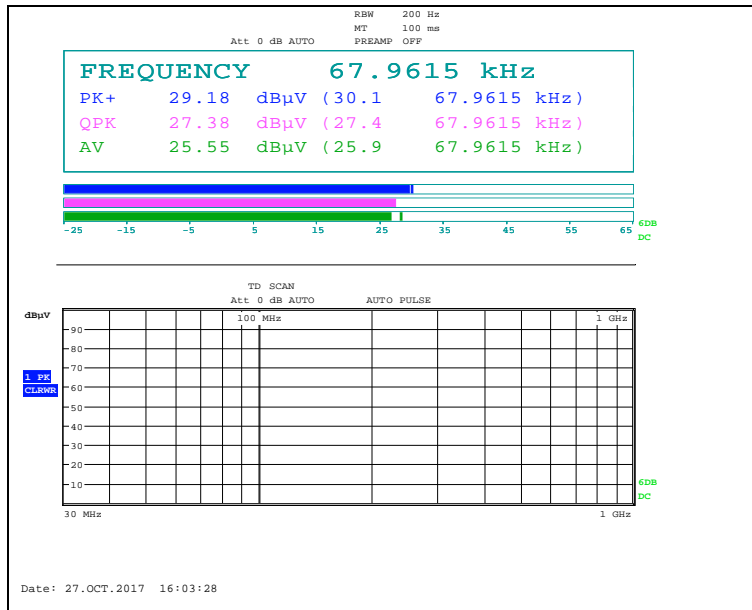


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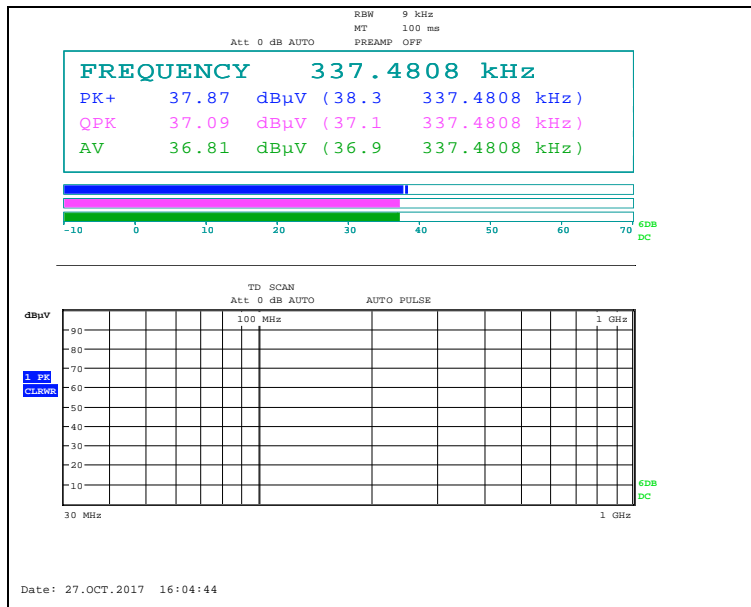


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Charging mode (100 % battery status of client device)



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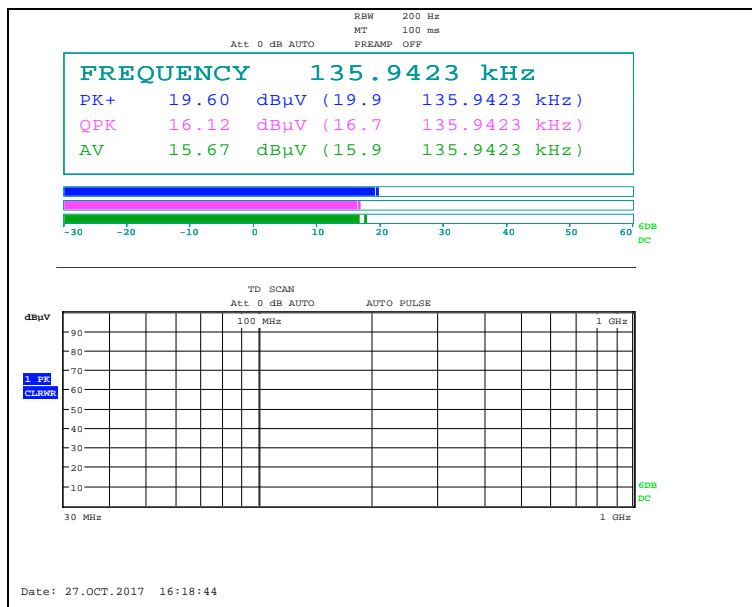
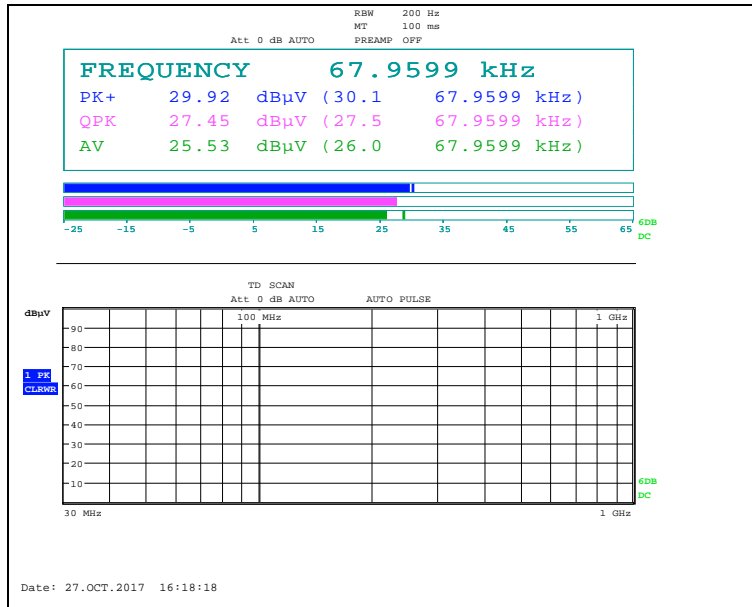


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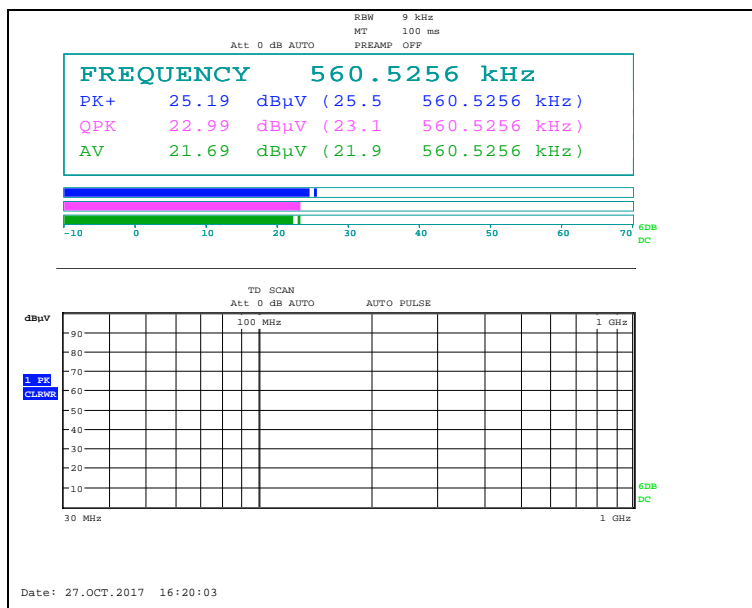
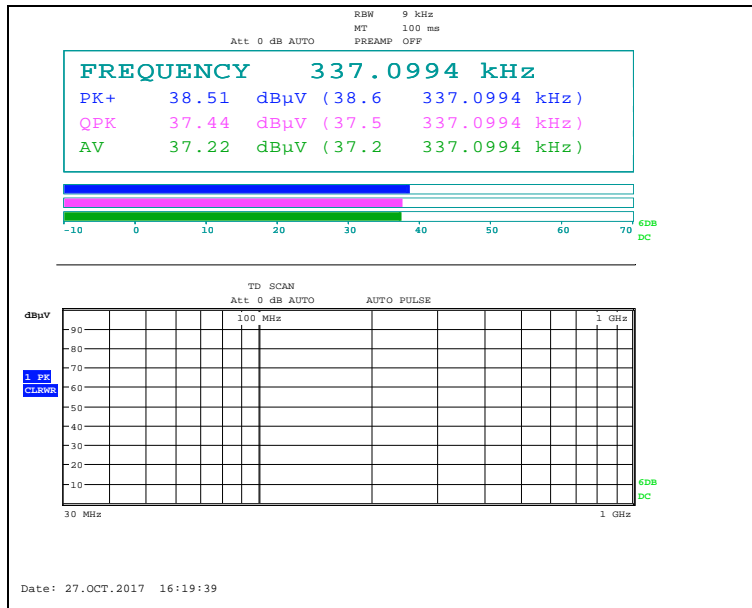
Test Condition: Ant. 3

Test plots

Charging mode (less than 1 % battery status of client device)

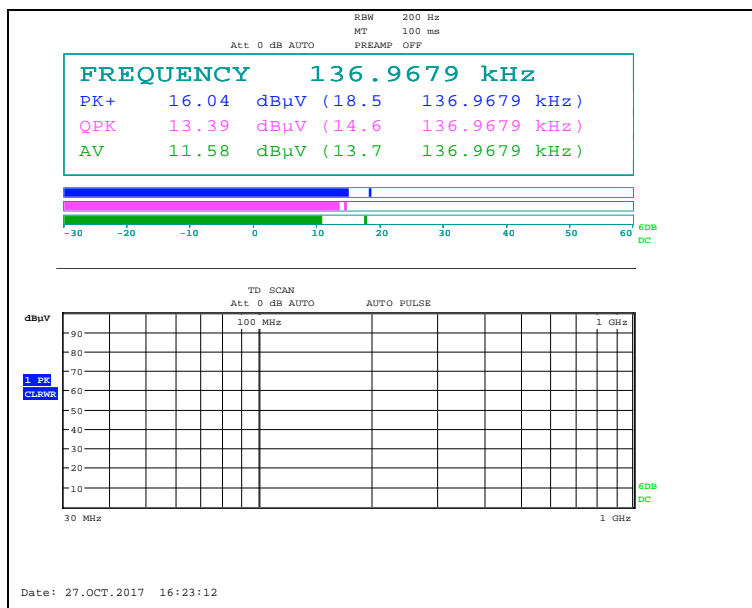
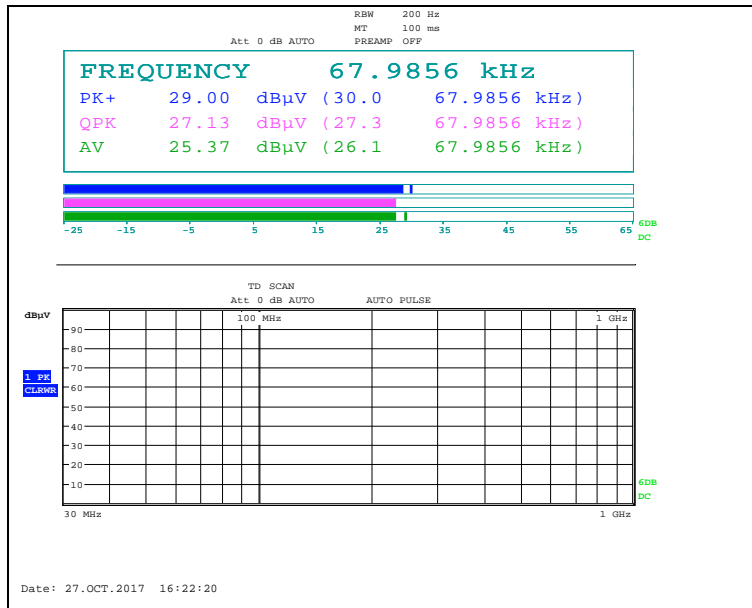


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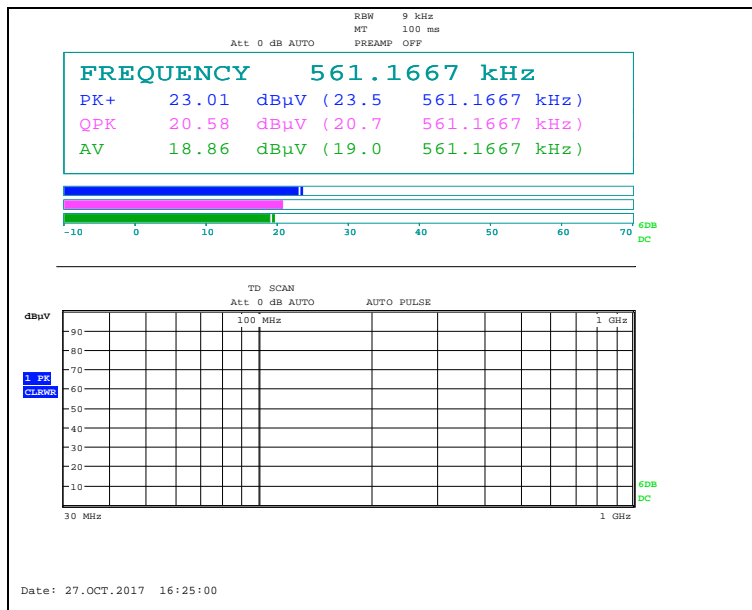
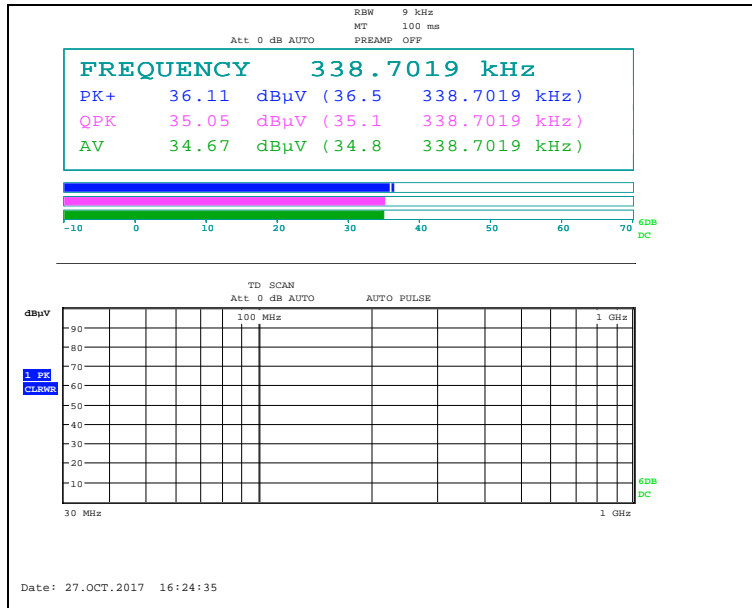


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Charging mode (less than 50 % battery status of client device)

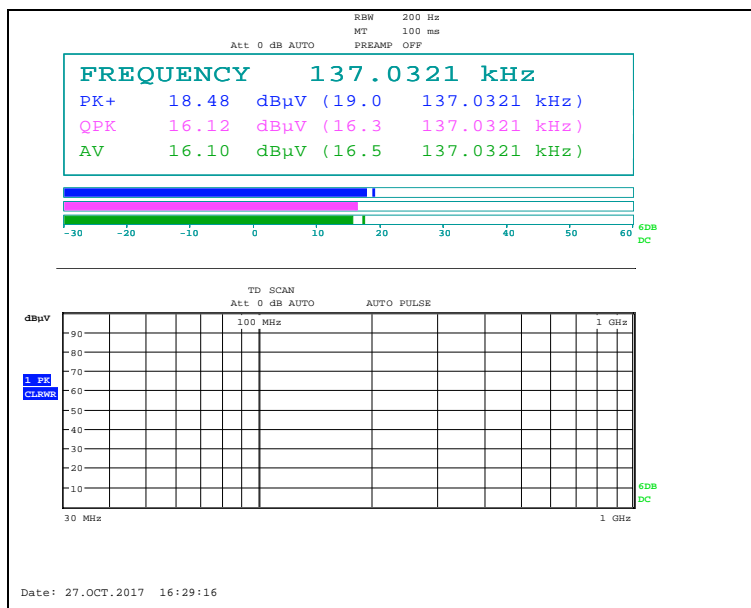
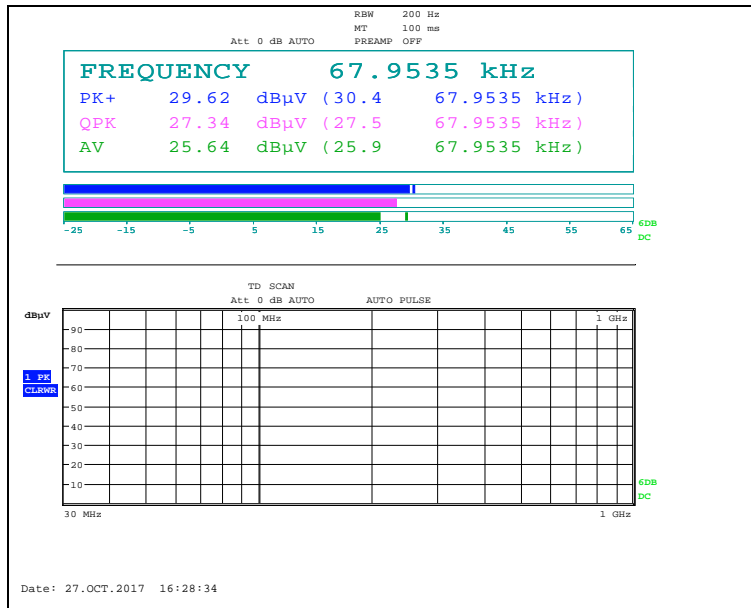


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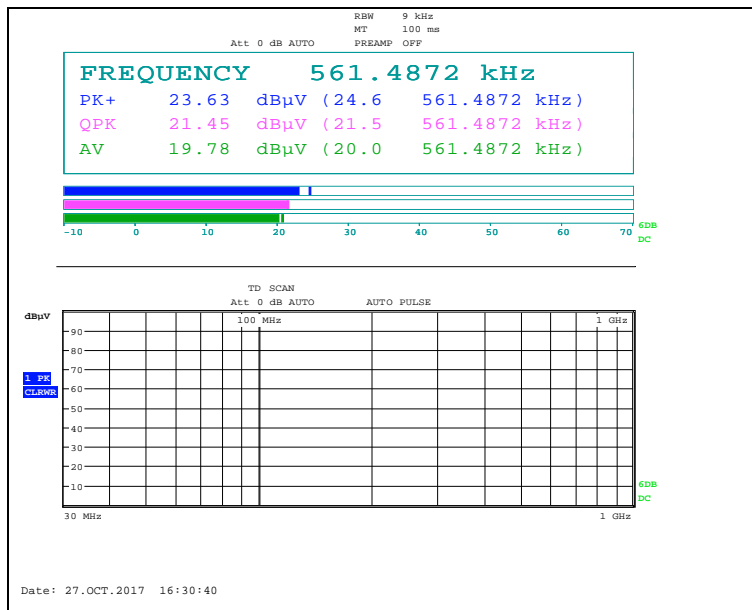
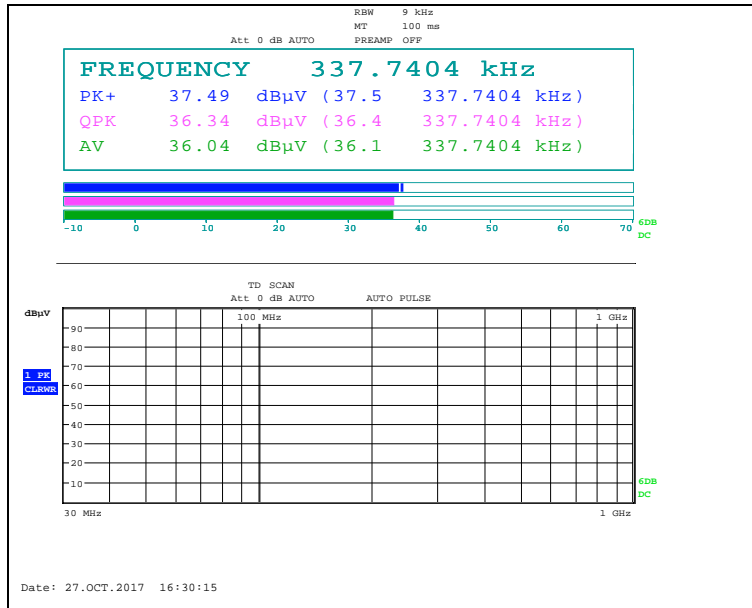


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Charging mode (100 % battery status of client device)



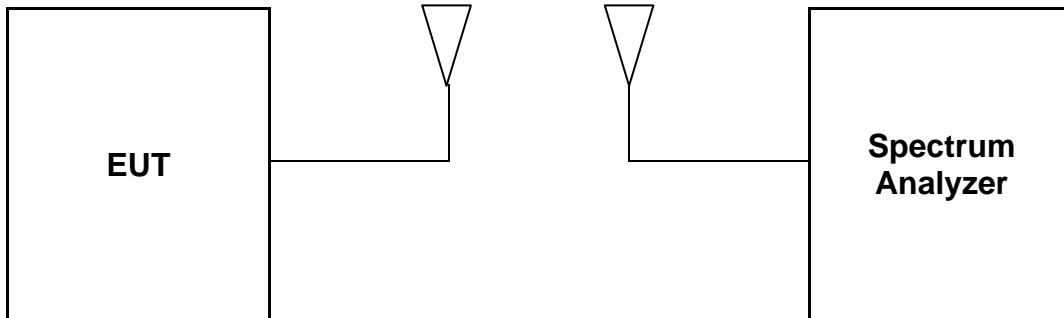
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3. 20 dB Bandwidth

3.1. Test Setup



3.2. Limit

None; for reporting purposed only

3.3. Test Procedure

- a. Span = set to capture all products of the modulation process, including the emission skirts.
 RBW = in the range of 1 % to 5 % of the 20 dB Bandwidth,
 VBW = approximately 3 x RBW, Sweep = auto, Detector = peak, Trace = max hold.
- b. The marker-to-peak function to set the mark to the peak of the emission. Use the marker-delta function to measure 20 dB down one side of the emission. Reset the function, and move the marker to the other side of the emission, until it is (as close as possible to) even with the reference marker level. The marker-delta reading at this point is 20 dB bandwidth of the emission.

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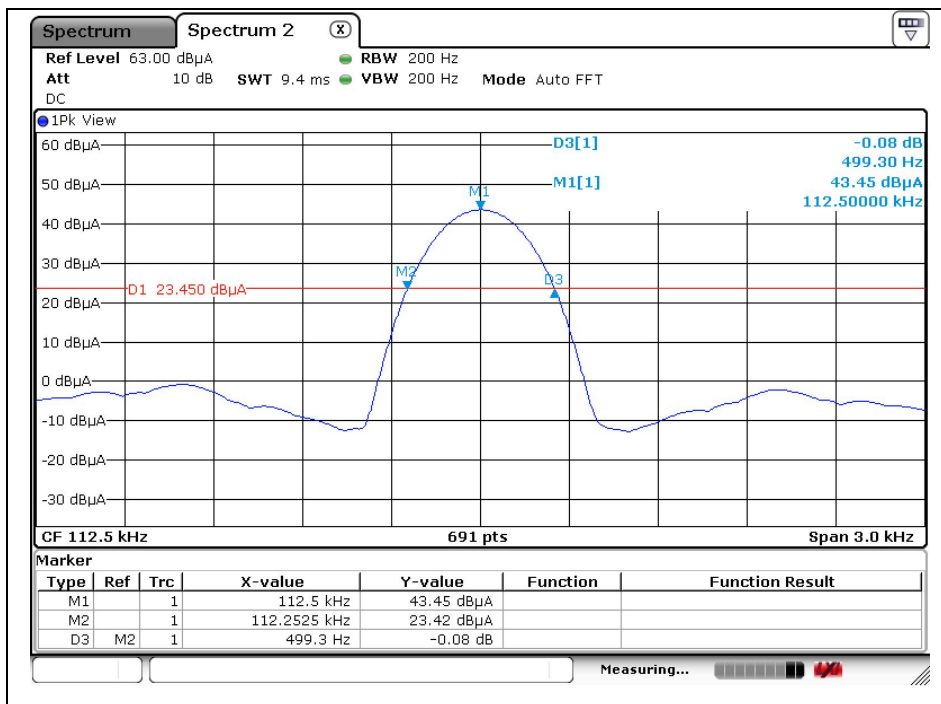
3.4. Test Result

Ambient temperature : (23 ± 1) °C
 Relative humidity : 47 % R.H.

| Test condition | EUT status | 20 dB Bandwidth (Hz) | Limit |
|----------------|--|----------------------|-------------------------|
| Ant. 1 | With client device (100 % battery status of client device) | 499.30 | Reporting proposed only |
| Ant. 2 | | 503.60 | |
| Ant. 3 | | 499.30 | |

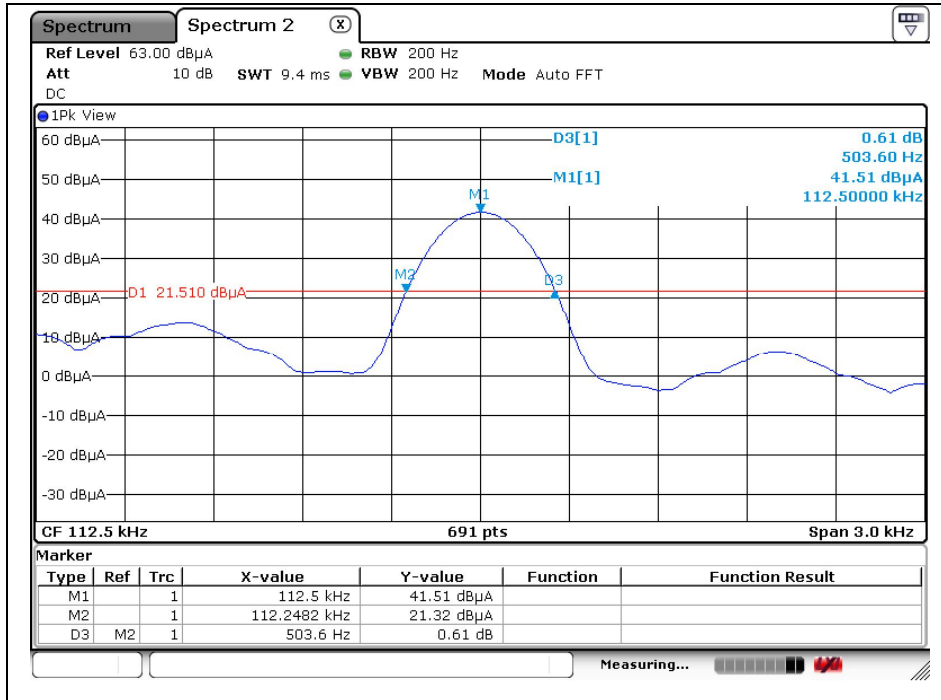
20 dB Bandwidth

Ant. 1

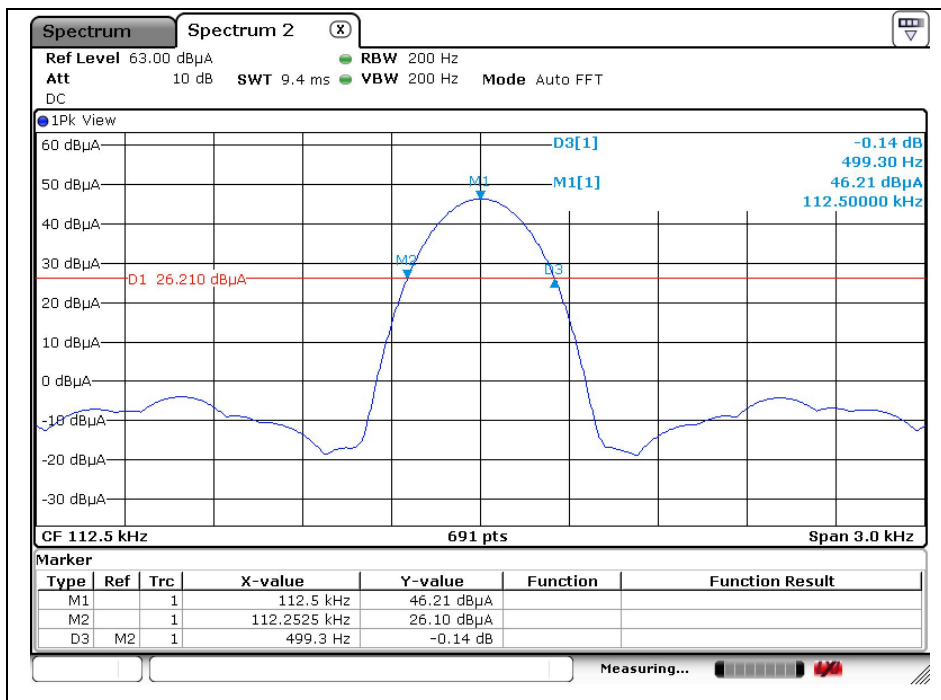


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Ant. 2



Ant. 3



- End of the Test Report -

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