

Annex 1: Measuring diagrams (FCC) to  
**TEST REPORT**  
No.: 19-1-0067201T05a



According to:  
**FCC Regulations Title 47, Subpart 18**  
§18.305

for

Continental Automotive GmbH

D-WMI2020B  
Wireless Power Charger

FCC-ID: KR5DWMI2020B

Laboratory Accreditation and Listings
<div style="text-align: center;"><p>Deutsche Akkreditierungsstelle D-PL-12047-01-01 D-PL-12047-01-03 D-PL-12047-01-04</p></div> <p>Accredited EMC-Test Laboratory</p>
accredited according to DIN EN ISO/IEC 17025
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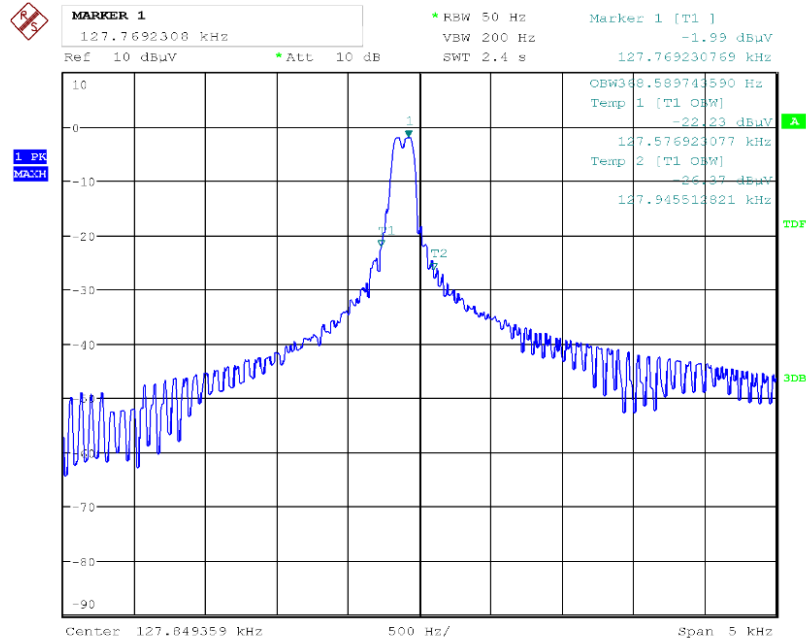
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# 1. Measurement diagrams

## 1.1. 99% OBW (for information only)

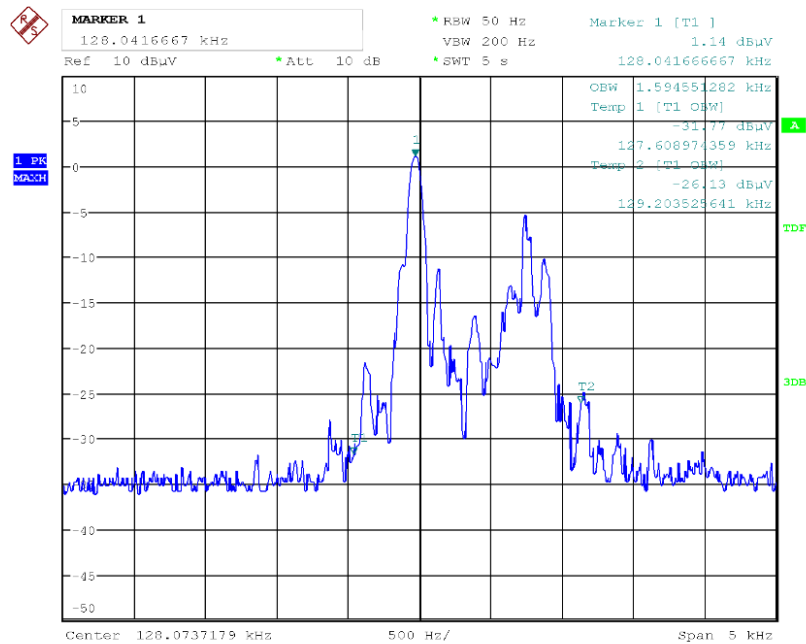
### 1.1.1. Op. Mode 1 + setup 2 (TX - ping mode)



Date: 25.JUN.2019 16:10:42

Diagram 1: OBW 99% (EUT B, High variant)

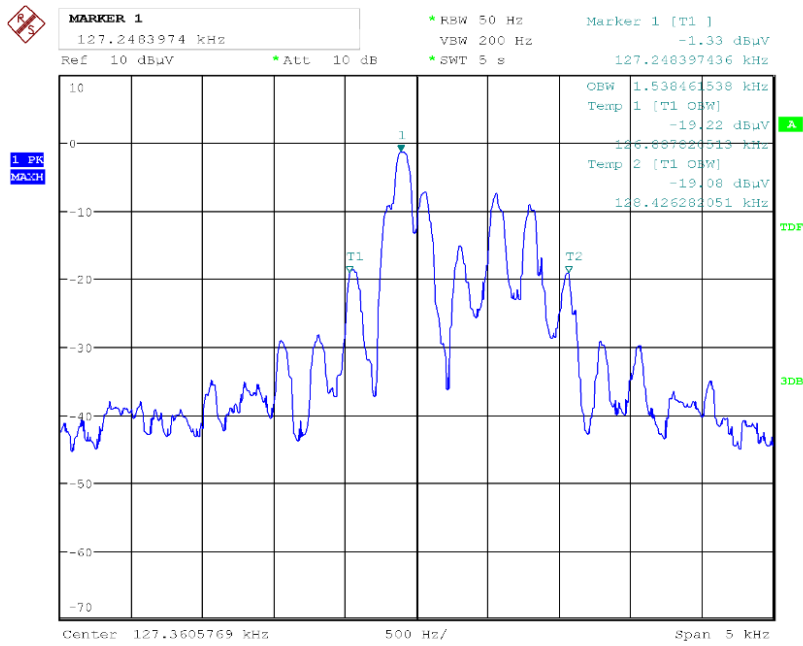
### 1.1.2. Op.Mode 3/4 + setup 1 (TX/RX – charging nominal load 15 W)



Date: 24.JUN.2019 14:21:37

**Diagram 2: OBW 99% Sample 12 (EUT A, High Variant)**

**1.1.3. Op.Mode 3/4 + setup 3 (TX/RX – charging nominal load 15 W)**



Date: 24.JUN.2019 15:08:05

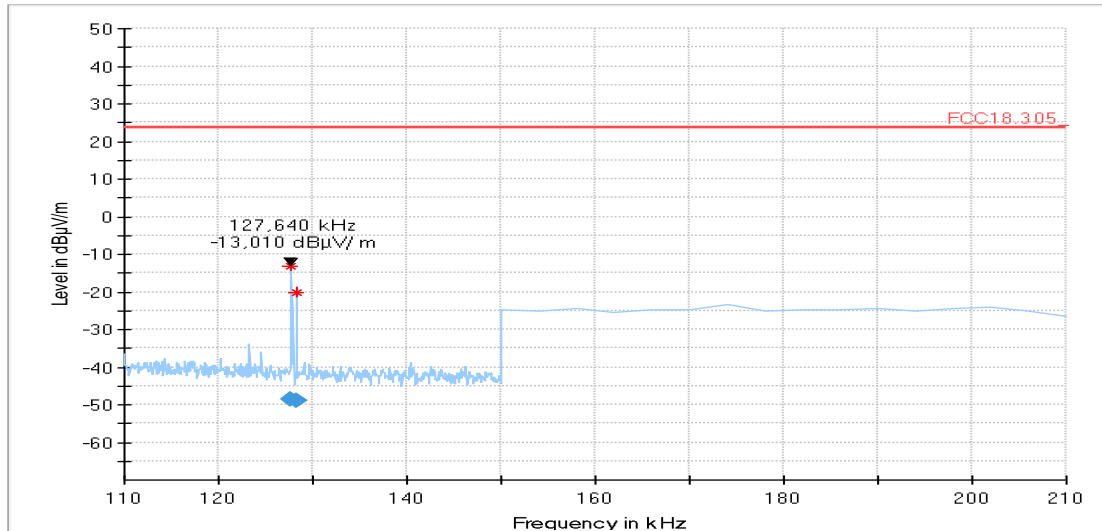
**Diagram 3: OBW 99% Sample 08 (EUT C, low variant)**

## 1.2. Radiated field strength emissions below 30 MHz

### 1.2.1. Op.Mode 1 + setup 2

#### Diagram 2.03a\_Carrier\_127KHz\_Laying\_Ping mode

Full Spectrum



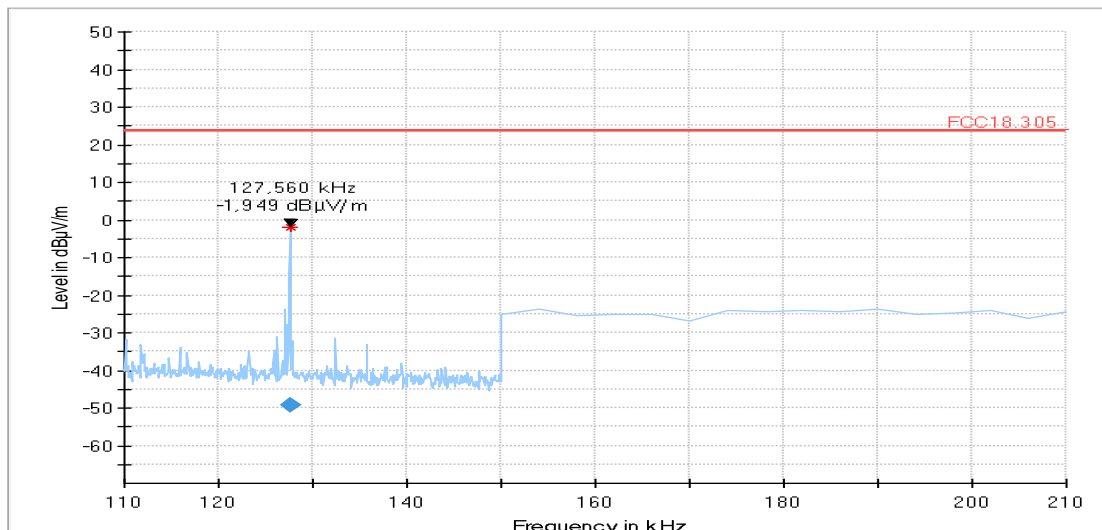
#### Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB)
0.127640	-48.61	23.52	72.13	1000.0	0.200	H	214.0	-68.6
0.128280	-48.99	23.52	72.51	1000.0	0.200	H	147.0	-68.6

Remark: Due to low Duty-Cycle of the Qi-Ping mode, Peak values are used for the results.

#### Diagram 2.03b\_Carrier\_127 kHz\_Standing\_Ping mode

Full Spectrum



#### Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB)
0.127560	-49.34	23.52	72.86	1000.0	0.200	H	135.0	-68.6

Remark: Due low Duty-Cycle of the Qi-Ping mode, Peak values are used for the results

1.2.2. Op.Mode 3/4 + setup 1

Diagram 2.05\_Carrier\_127 kHz\_S12\_Standing\_ChargingMode

Full Spectrum

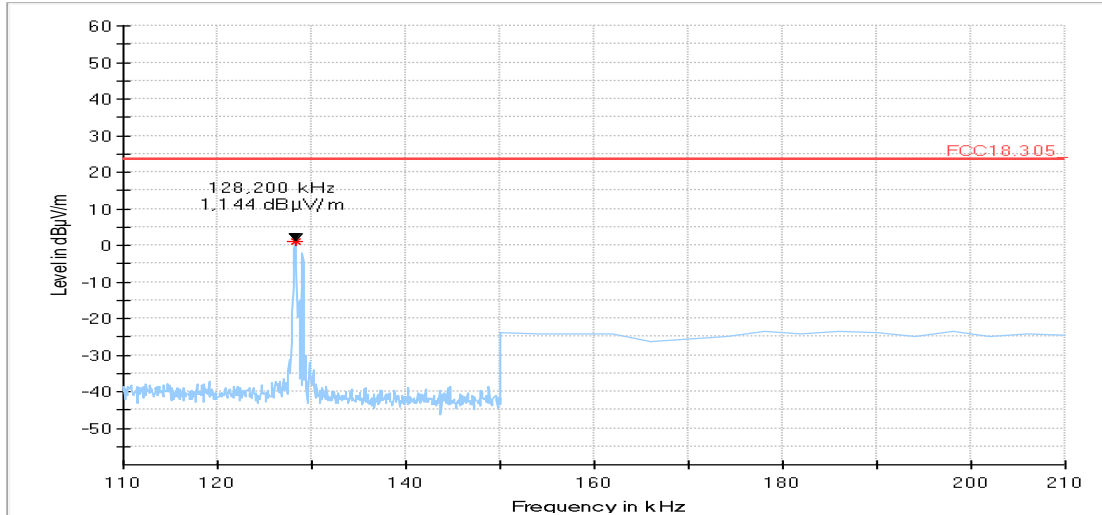
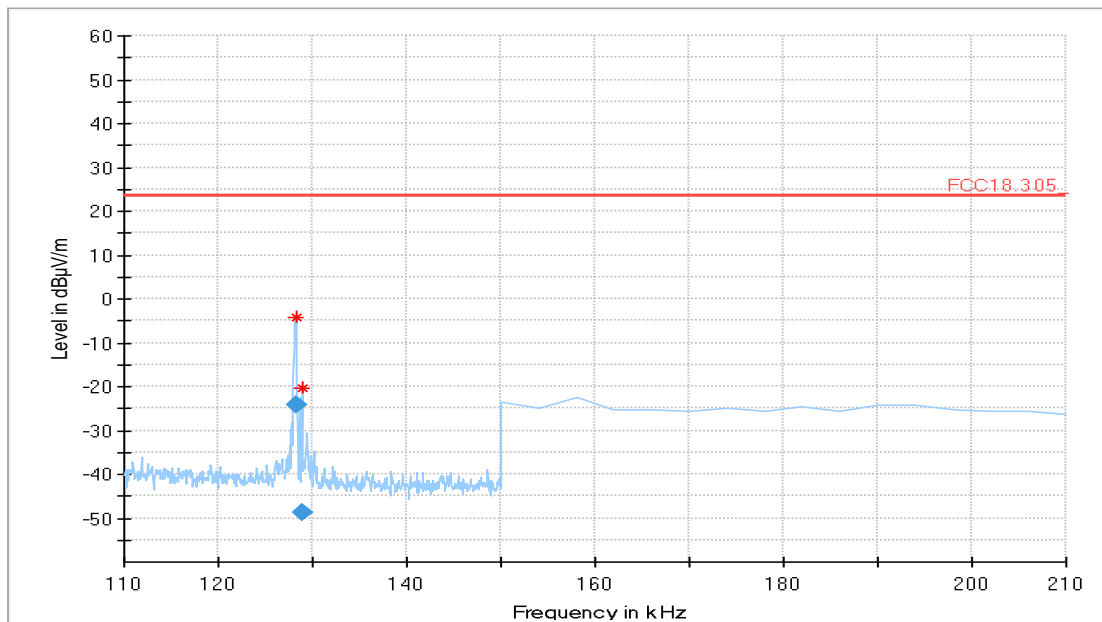


Diagram 2.06\_Carrier\_127 kHz\_S12\_Laying\_ChargingMode

Full Spectrum



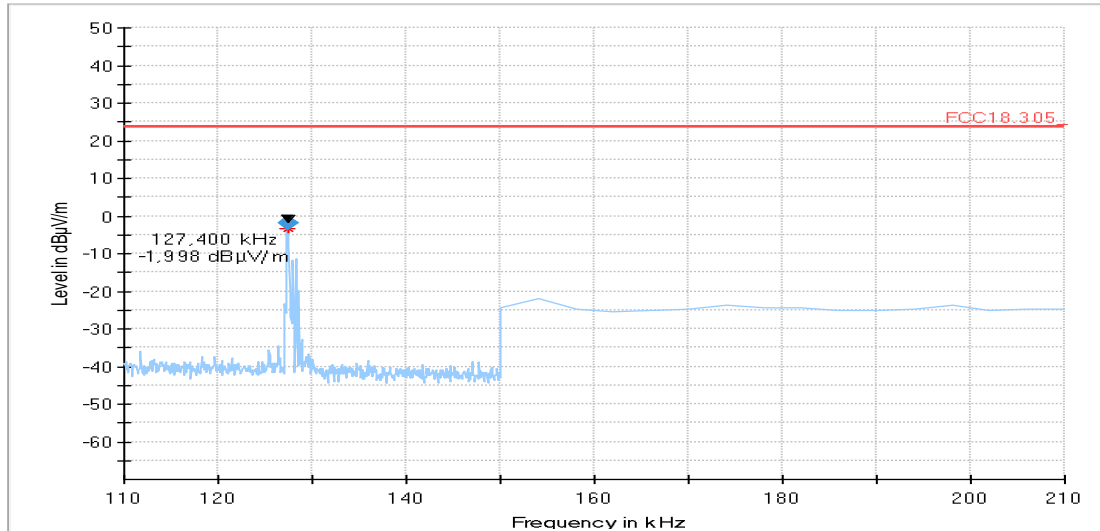
Final\_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB)	Comment
0.128200	-24.19	23.52	47.71	0.200	H	199.0	-68.6	08:43:52 - 29.05.2019
0.128920	-48.83	23.52	72.35	0.200	V	274.0	-68.6	08:50:13 - 29.05.2019

1.2.3. Op.Mode 3/4 + setup 3

Diagram 2.01\_Carrier\_127 kHz\_S08\_Standing\_Charging mode

Full Spectrum



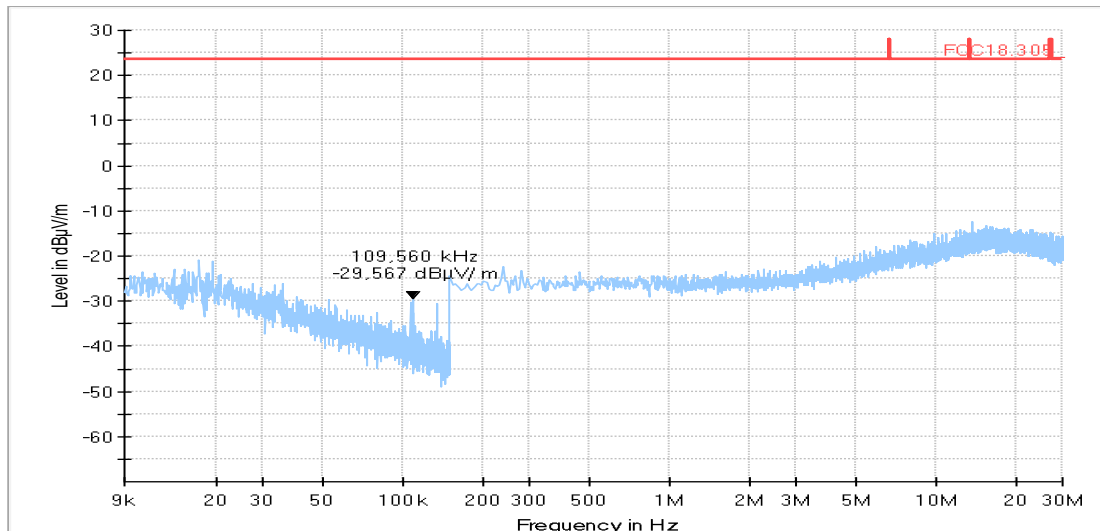
Final\_Result

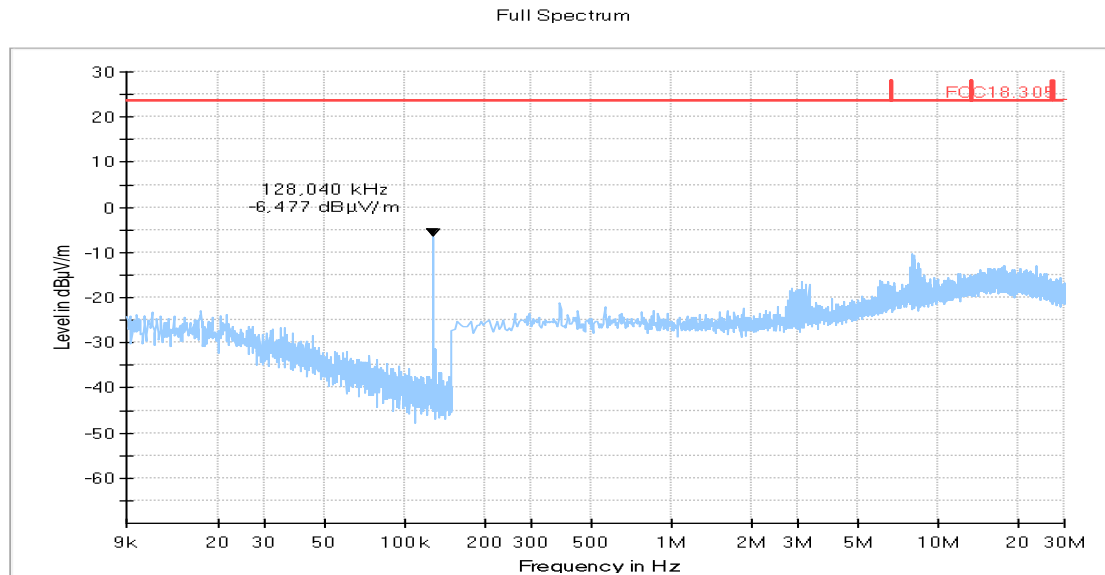
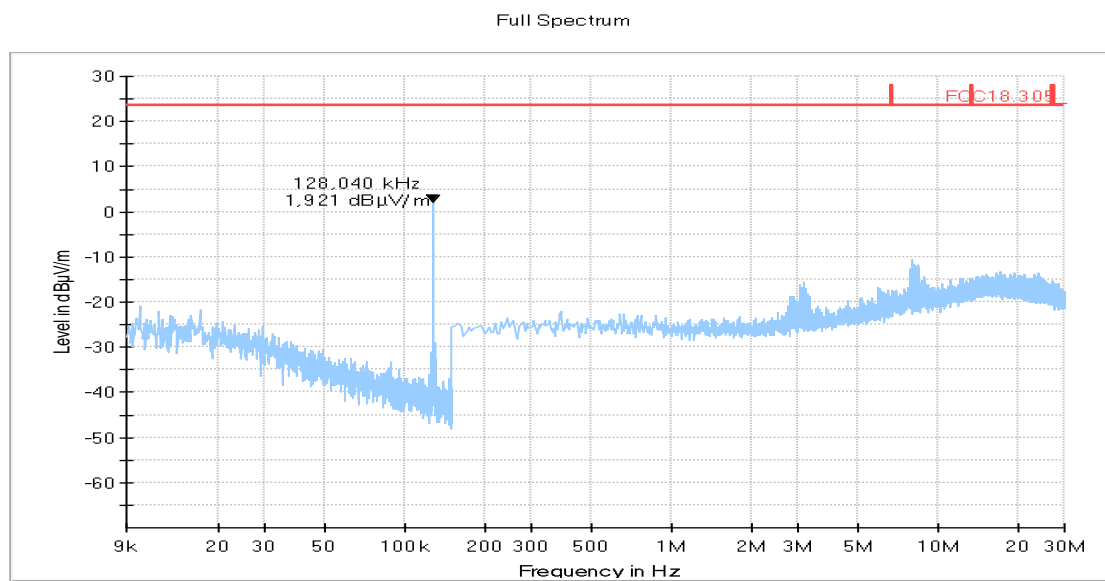
Frequency (MHz)	Average (dBµV/)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB)
0.127400	-2.00	23.52	25.52	1000.0	0.200	H	277.0	-68.6

1.2.4. Op.Mode 1 + setup 2

Diagram 2.04\_RSE\_Magnetic\_field\_S10\_Standing\_Ping mode

Full Spectrum

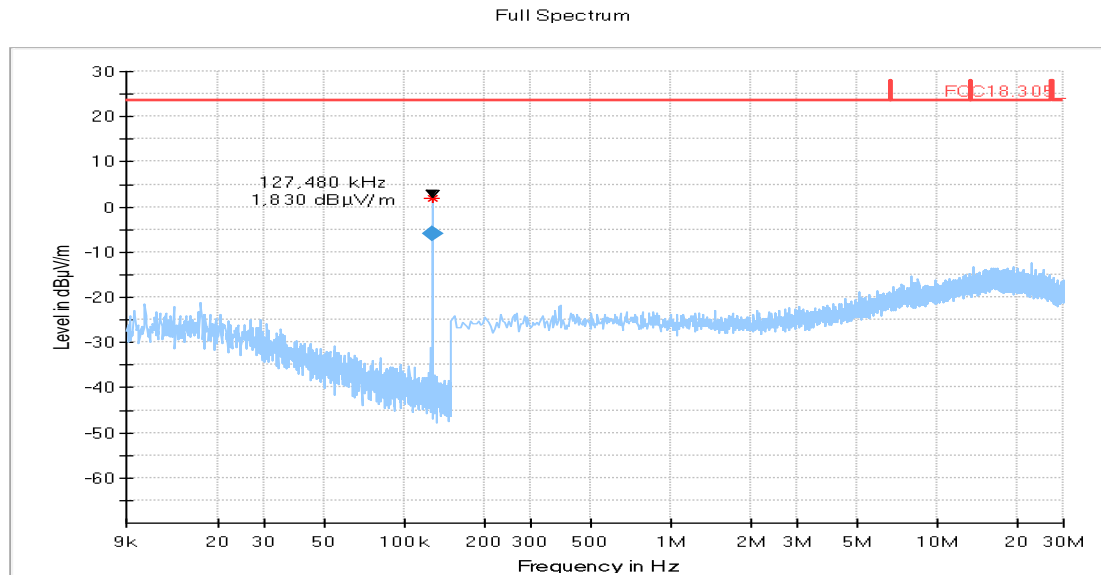


**1.2.5. Op.Mode 3/4 + setup 1****Diagram 2.07\_RSE\_Magnetic\_field\_S12\_Laying\_Charging mode****Diagram 2.08\_RSE\_Magnetic\_field\_S12\_Standing\_Charging mode**



1.2.6. Op.Mode 3/4 + setup 3

Diagram 2.02\_RSE\_Magnetic\_field\_S08\_Standing\_Charging mode



Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB)	Comment
0.127480	-5.90	23.52	29.42	1000.0	0.200	H	143.0	-68.6	15:21:07 - 21.05.2019

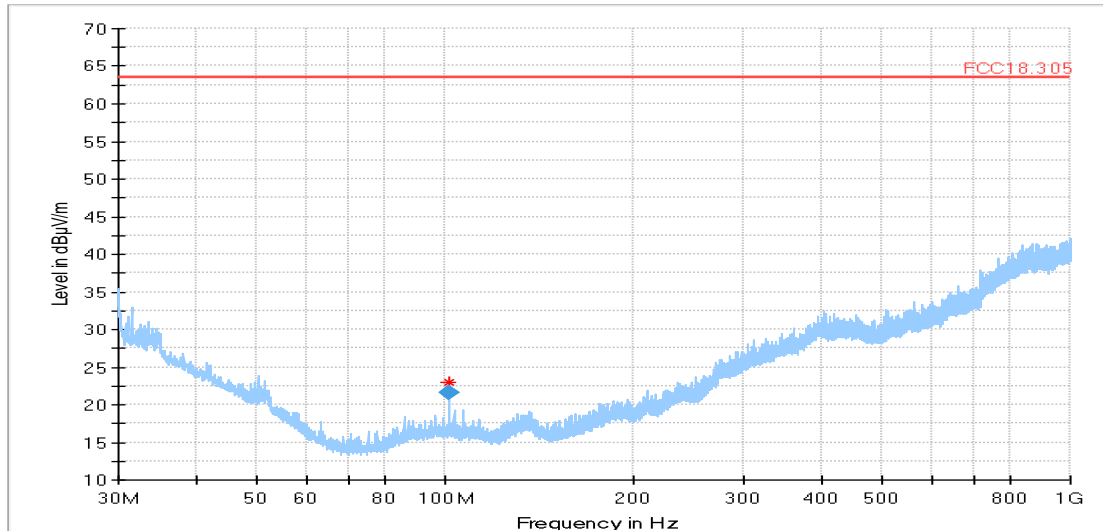
Remark. Standing position of EUT is determined to be the worst-case position among standing and lying.

### 1.3. Radiated field strength emissions 30 MHz – 1 GHz

#### 1.3.1. Op.Mode 1 + set-up 2

#### Diagram 3.02a\_RSE\_Sample10\_WPC\_PingMode\_laying

Full Spectrum

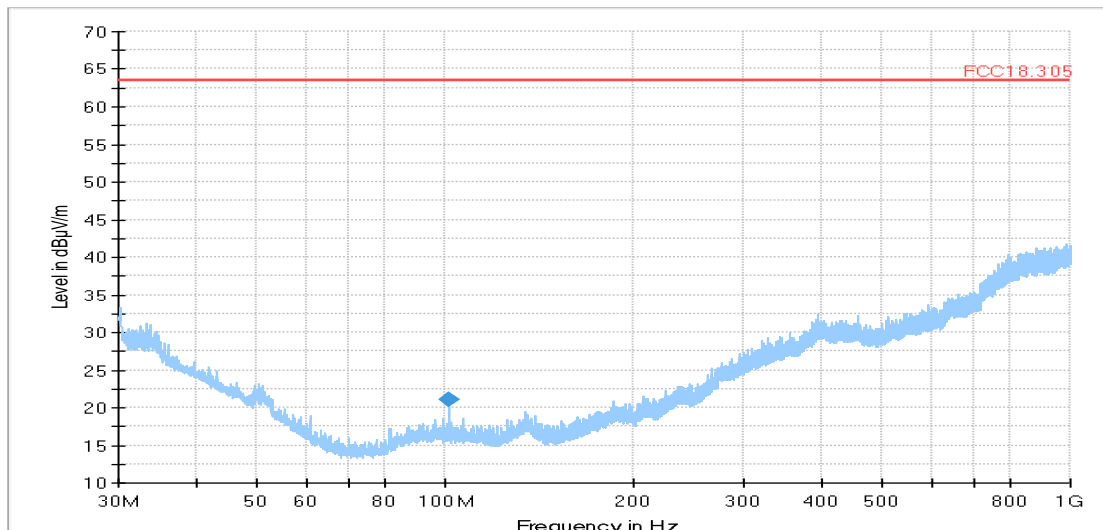


#### Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
101.308000	21.63	63.52	41.89	120.000	105.0	V	331.0	8.1

#### Diagram 3.02b\_RSE\_Sample10\_WPC\_PingMode\_standing

Full Spectrum



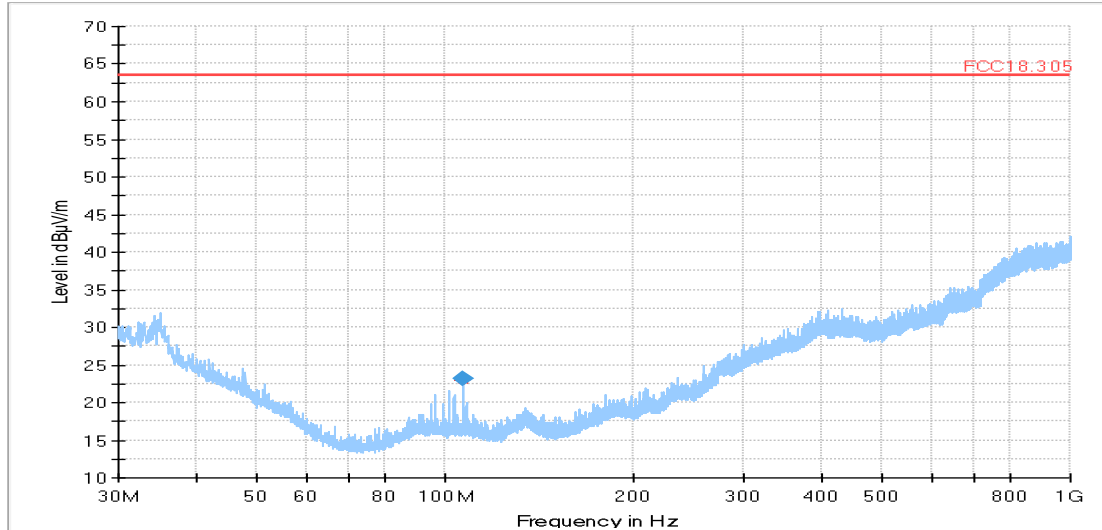
#### Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
101.300000	21.02	63.52	42.50	120.000	105.0	V	32.0	8.1

1.3.2. Op.Mode 3/4 + set-up 1

Diagram 3.03\_WMI2\_WPC\_S12\_ChargingMode\_Standing

Full Spectrum

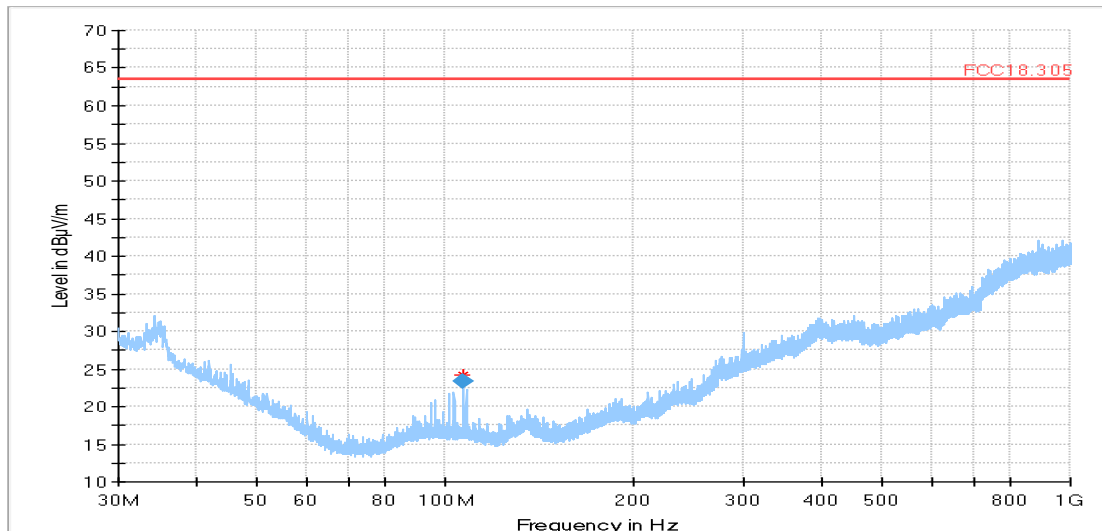


Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
106.700000	23.19	63.52	40.33	120.000	137.0	V	0.0	8.1

Diagram 3.04\_WMI2\_WPC\_S12\_ChargingMode\_Laying

Full Spectrum



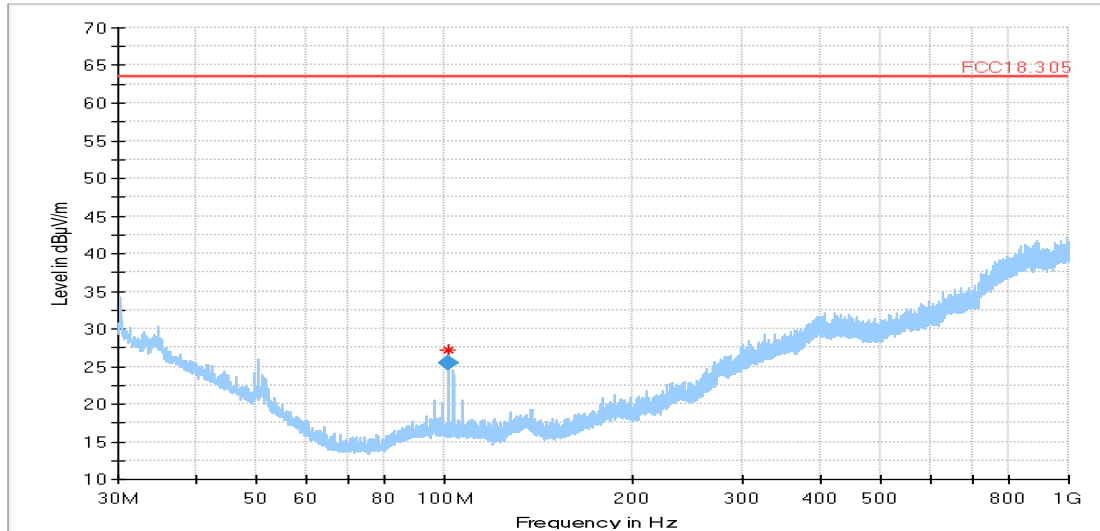
Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
106.692000	23.41	63.52	40.11	120.000	126.0	V	316.0	8.1

1.3.3. Op.Mode 3/4 + set-up 3

Diagram 3.01a\_ WMI2\_WPC\_ChargingMode\_Laying

Full Spectrum

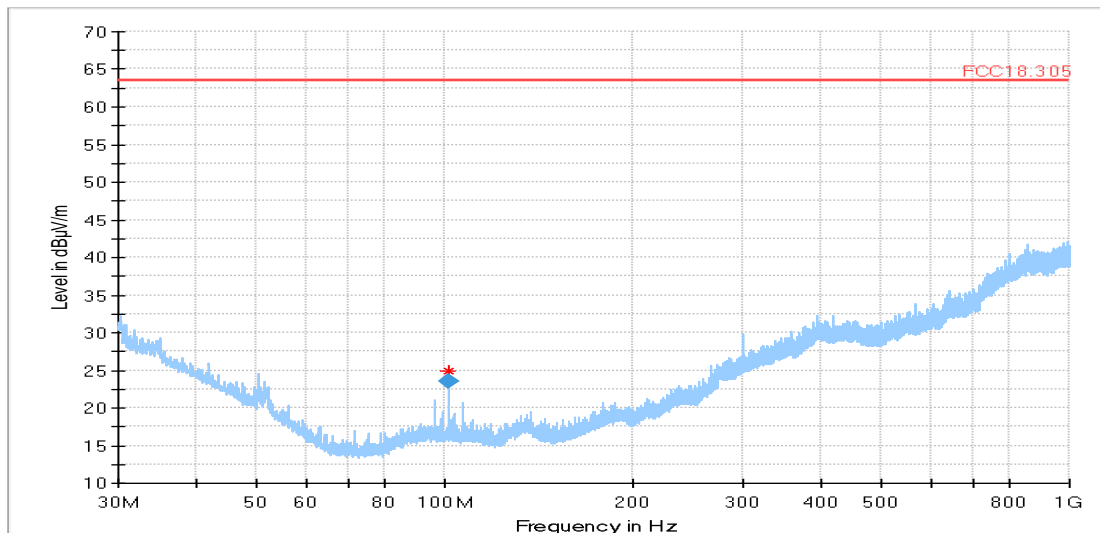


Final\_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
101.292000	25.41	63.52	38.11	120.000	105.0	V	277.0	8.1

Diagram 3.01b\_ WMI2\_WPC\_ChargingMode\_Standing

Full Spectrum



Final\_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
101.292000	23.56	63.52	39.96	120.000	121.0	V	70.0	8.1