

Annex 1: Measurement diagrams to  
**TEST REPORT**  
No.: 18-1-0178401T01a-C2



According to:  
47 CFR Part 15.519

for

**ELOKON GmbH**

**ELOshield Warning System  
Verification Module**

**FCC ID: 2ASP7-VERIFM-V01**

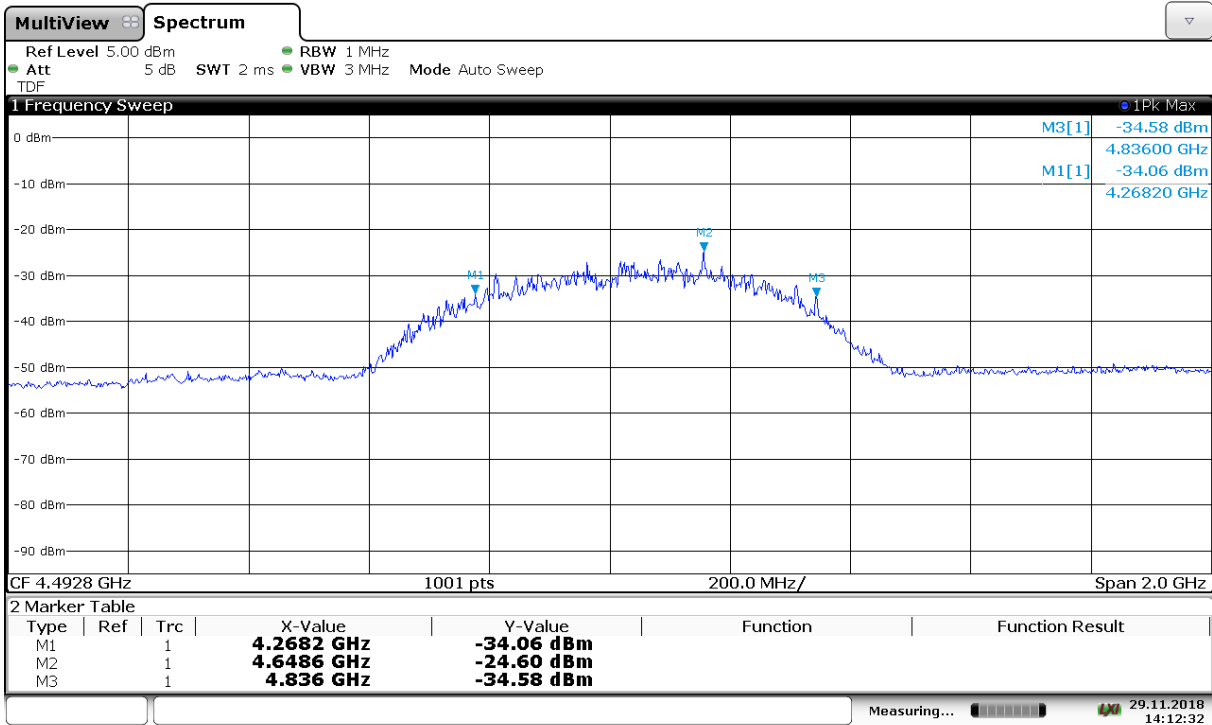
Laboratory Accreditation
  Deutsche Akkreditierungsstelle D-PL-12047-01-01 D-PL-12047-01-03 D-PL-12047-01-04
accredited according to DIN EN ISO/IEC 17025:2018
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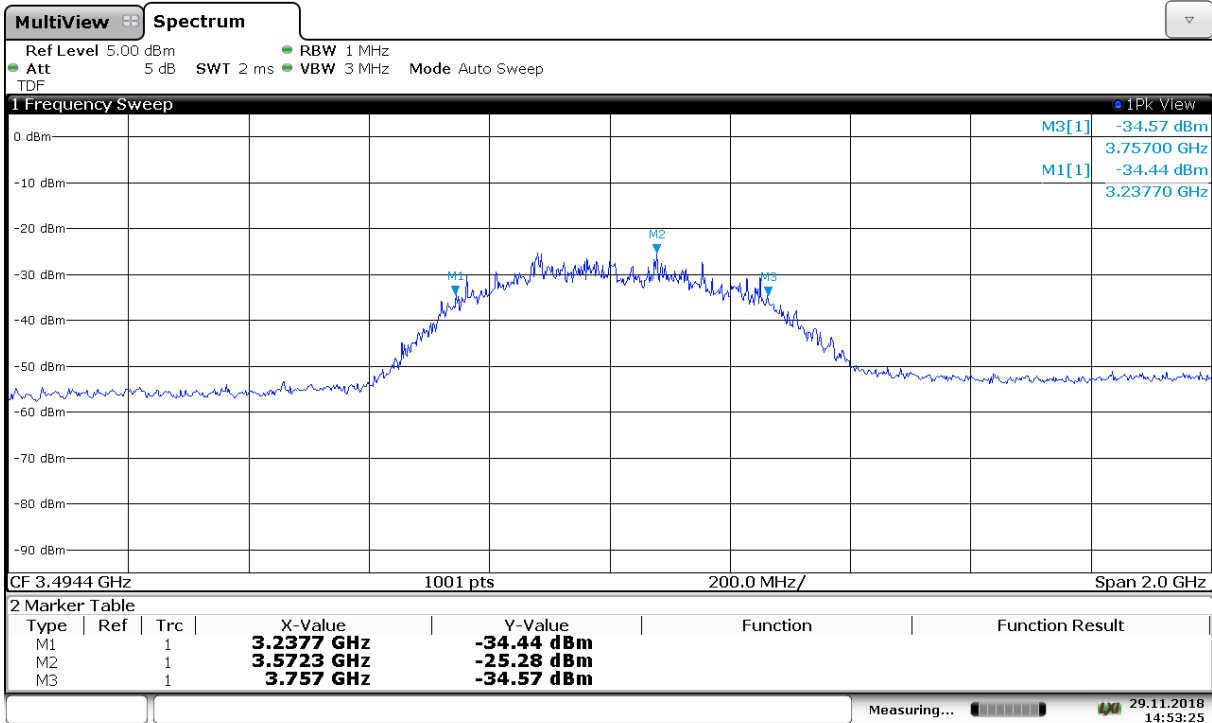
# 1. 10 dB bandwidth measurement

## 1.1. Op. Mode 1



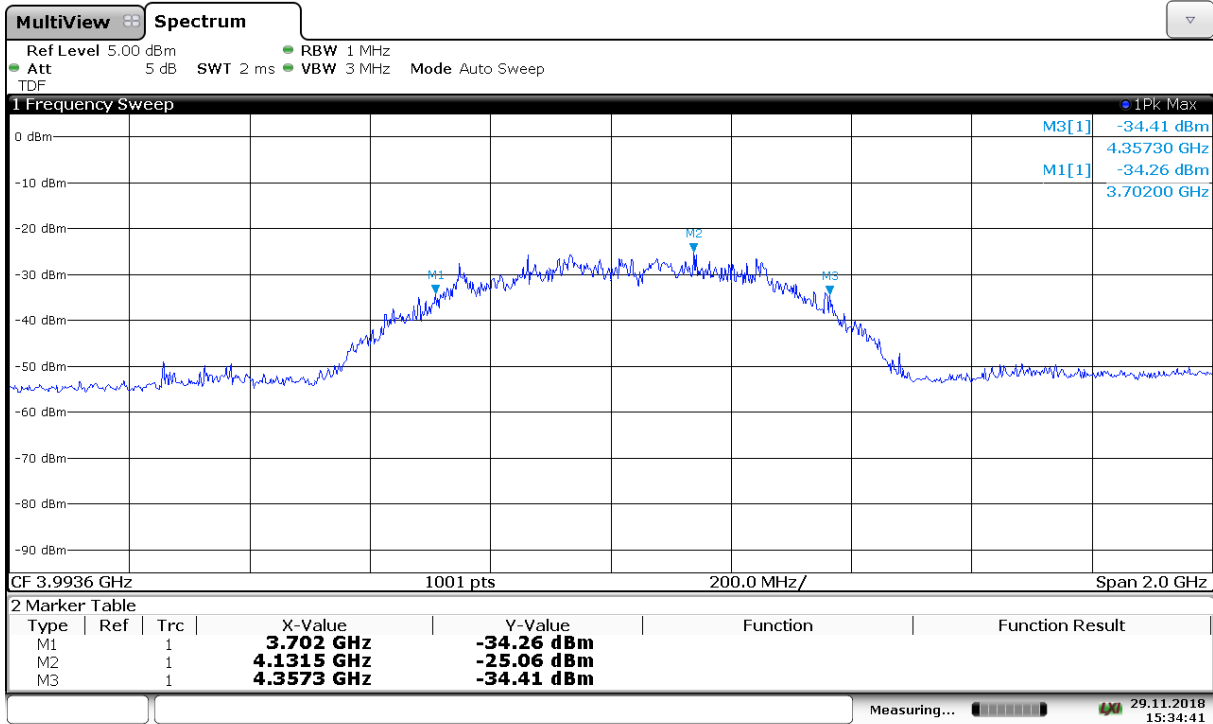
14:12:33 29.11.2018

## 1.2. Op. Mode 2



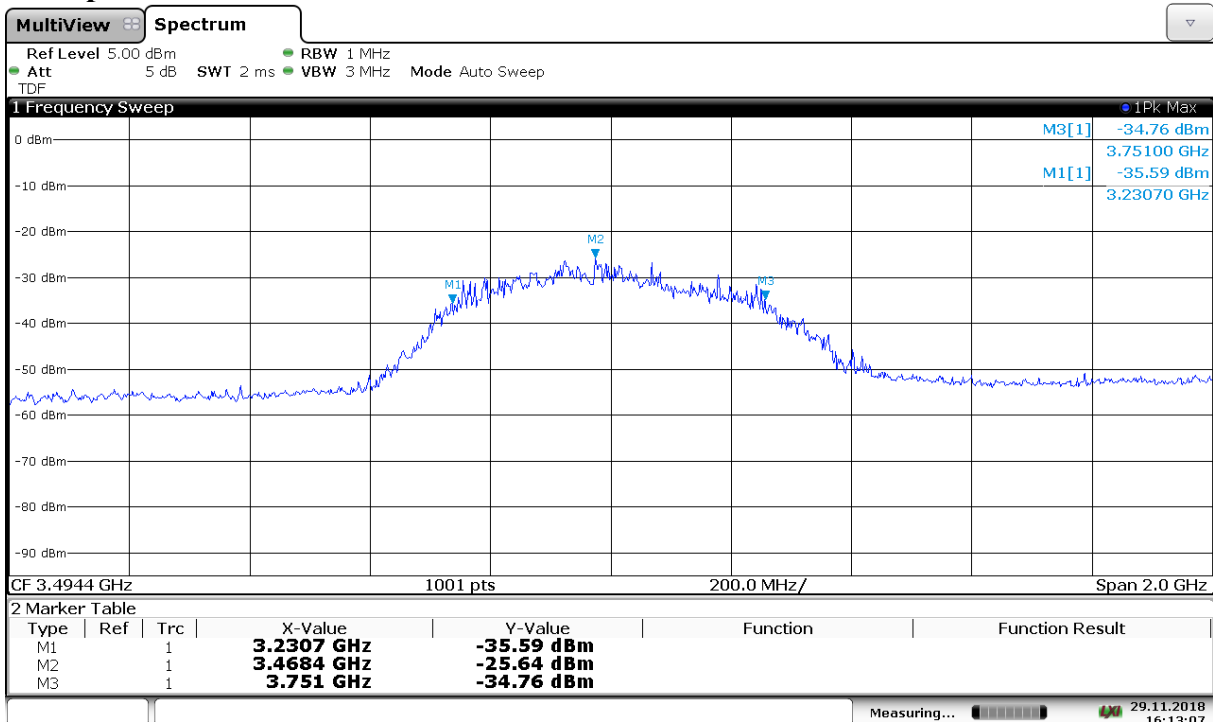
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### 1.3. Op. Mode 3



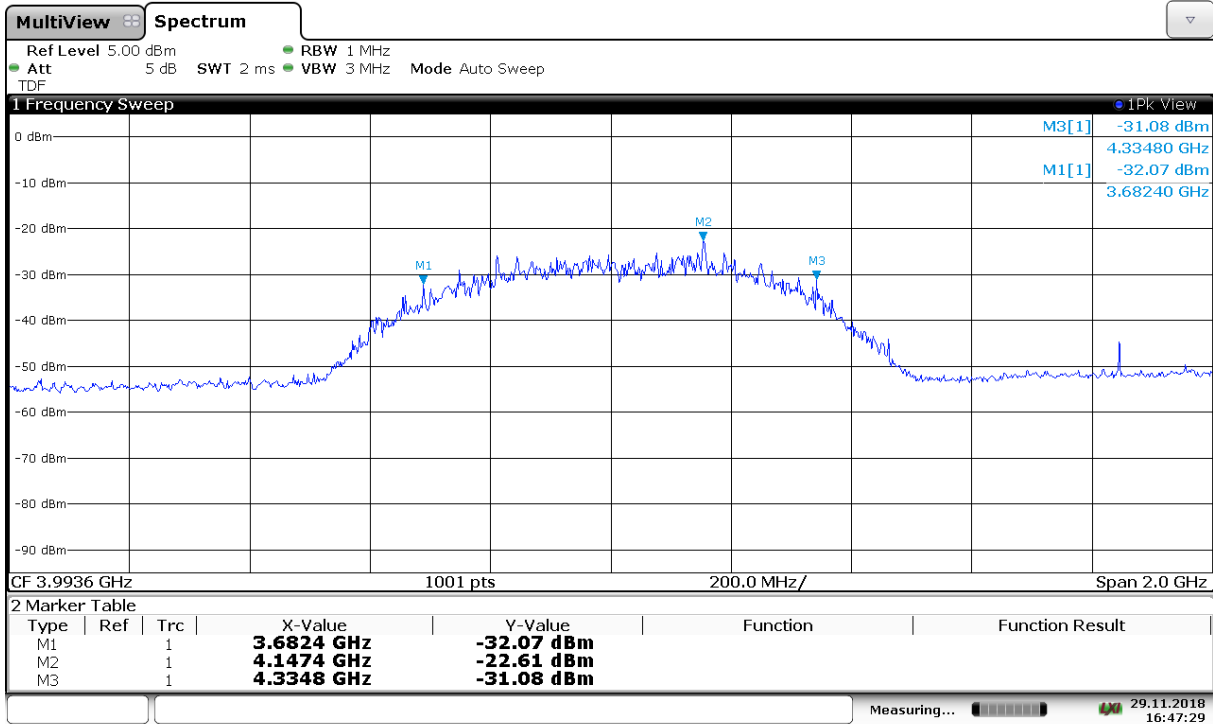
15:34:41 29.11.2018

### 1.4. Op. Mode 4



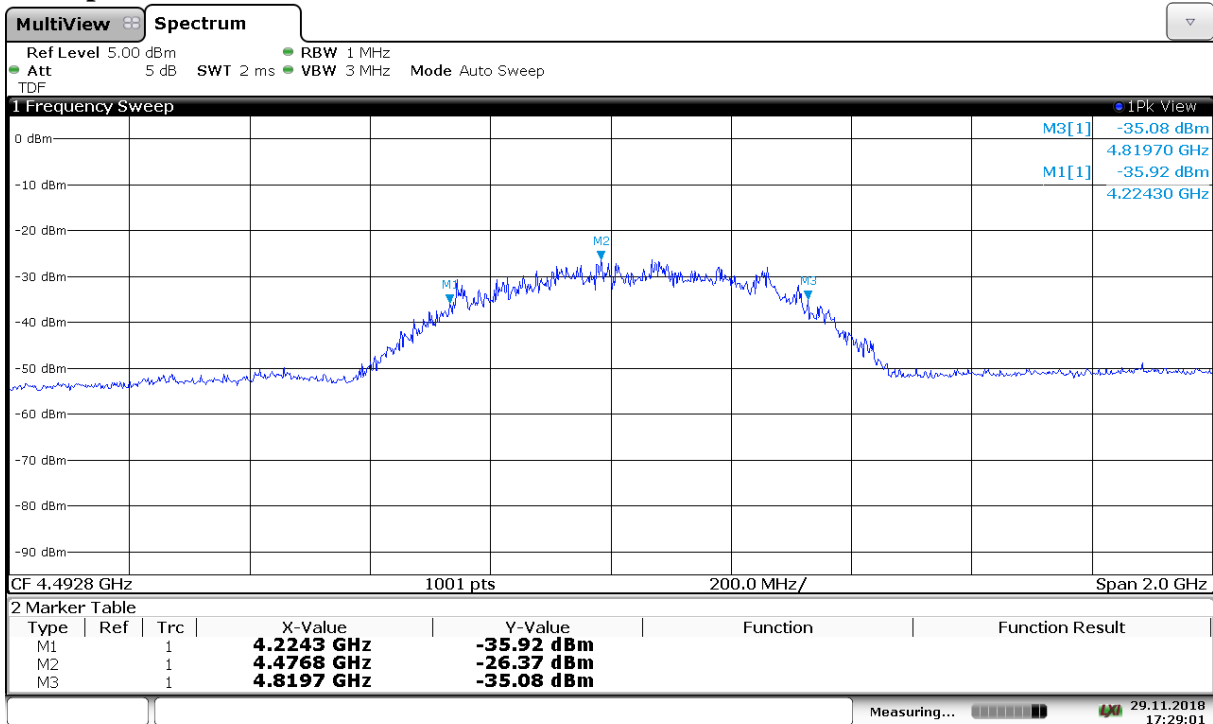
16:13:08 29.11.2018

### 1.5. Op. Mode 5



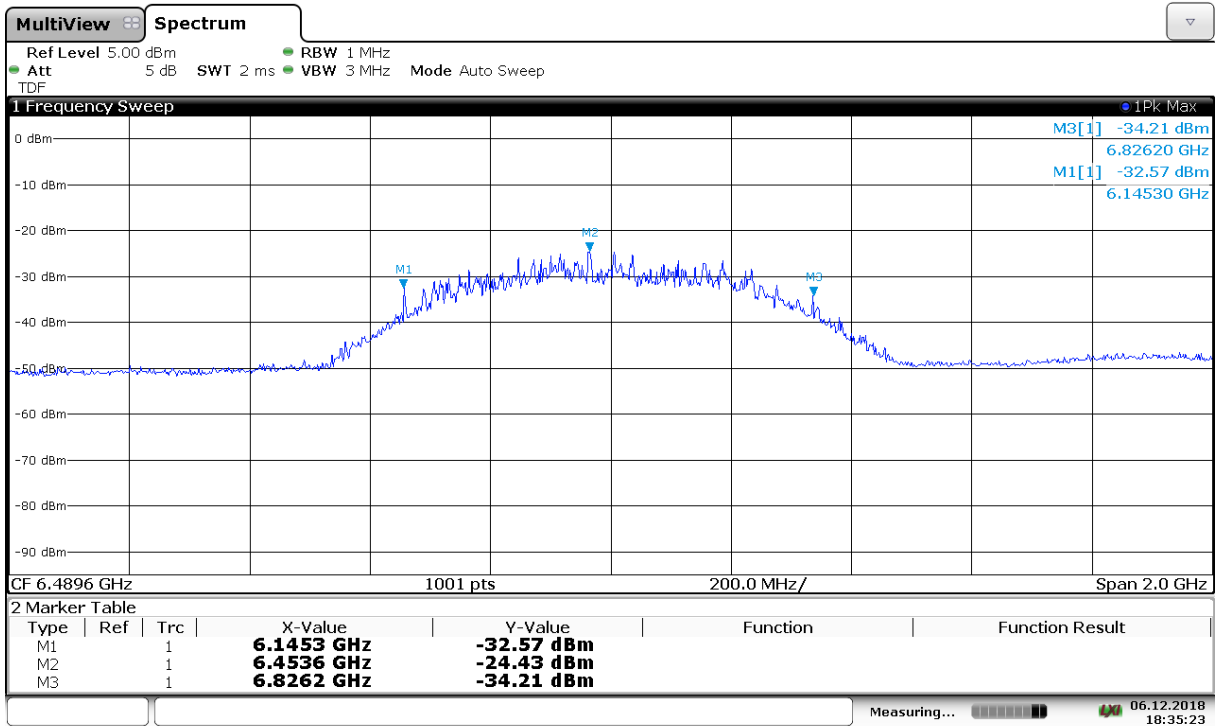
16:47:29 29.11.2018

### 1.6. Op. Mode 6



17:29:02 29.11.2018

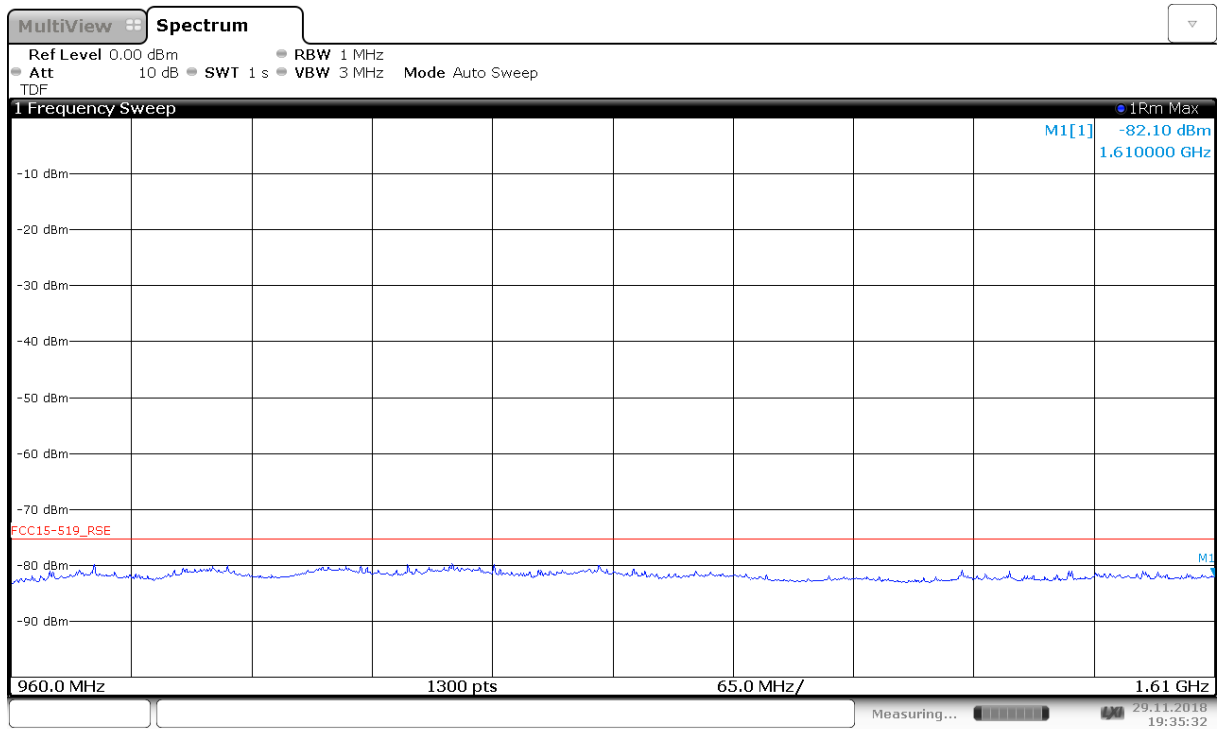
## 1.7. Op. Mode 7



18:35:23 06.12.2018

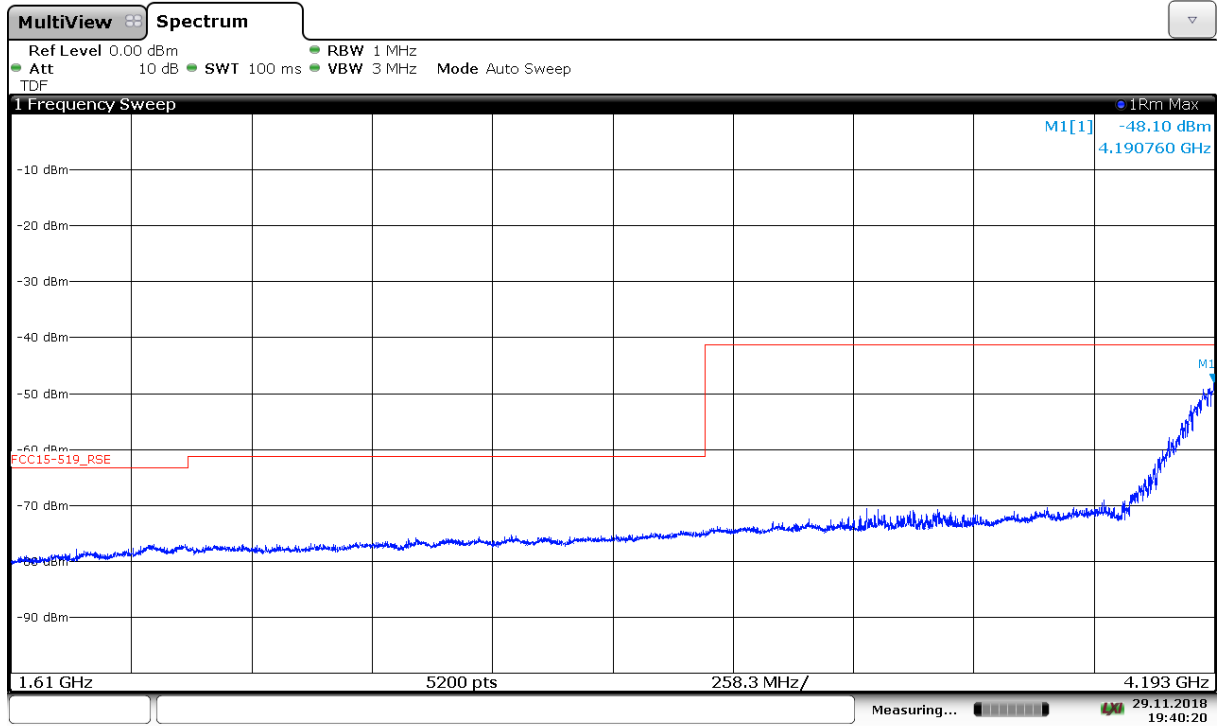
## 2. General Limit – Radiated field strength emissions, above 960 MHz

### 2.1. Frequency range 960 MHz – 1610 MHz, op. mode 1 and op. mode 7, ANT HOR + VER



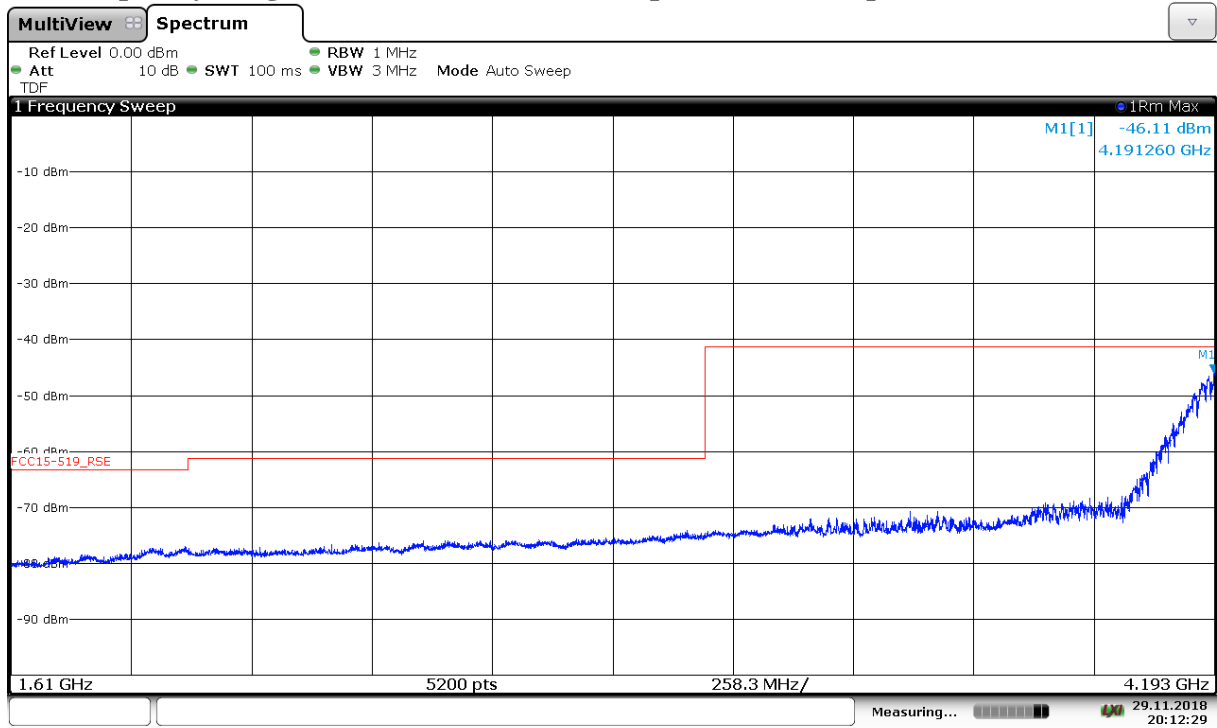
19:35:33 29.11.2018

### 2.2. Frequency range 1610 MHz – 4193 MHz, op. mode 1 and op. mode 7, ANT HOR



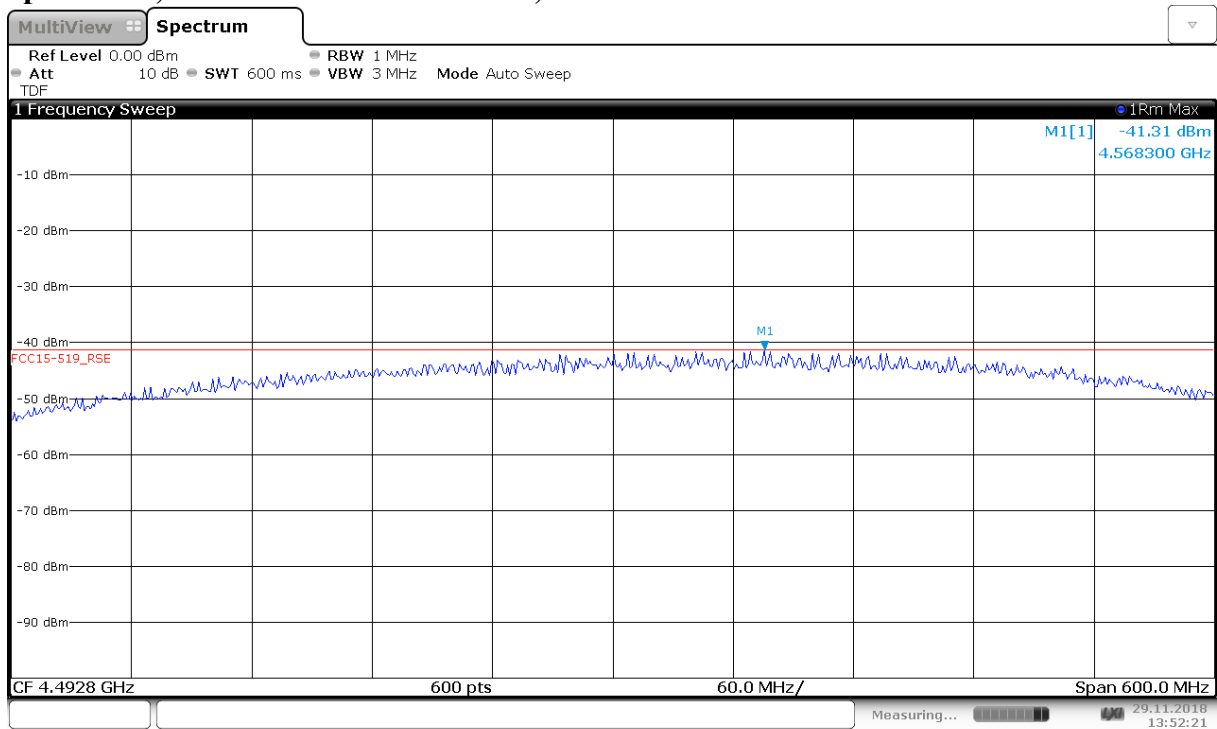
19:40:21 29.11.2018

### 2.3. Frequency range 1610 MHz – 4193 MHz, op. mode 1 and op. mode 7, ANT VER



20:12:29 29.11.2018

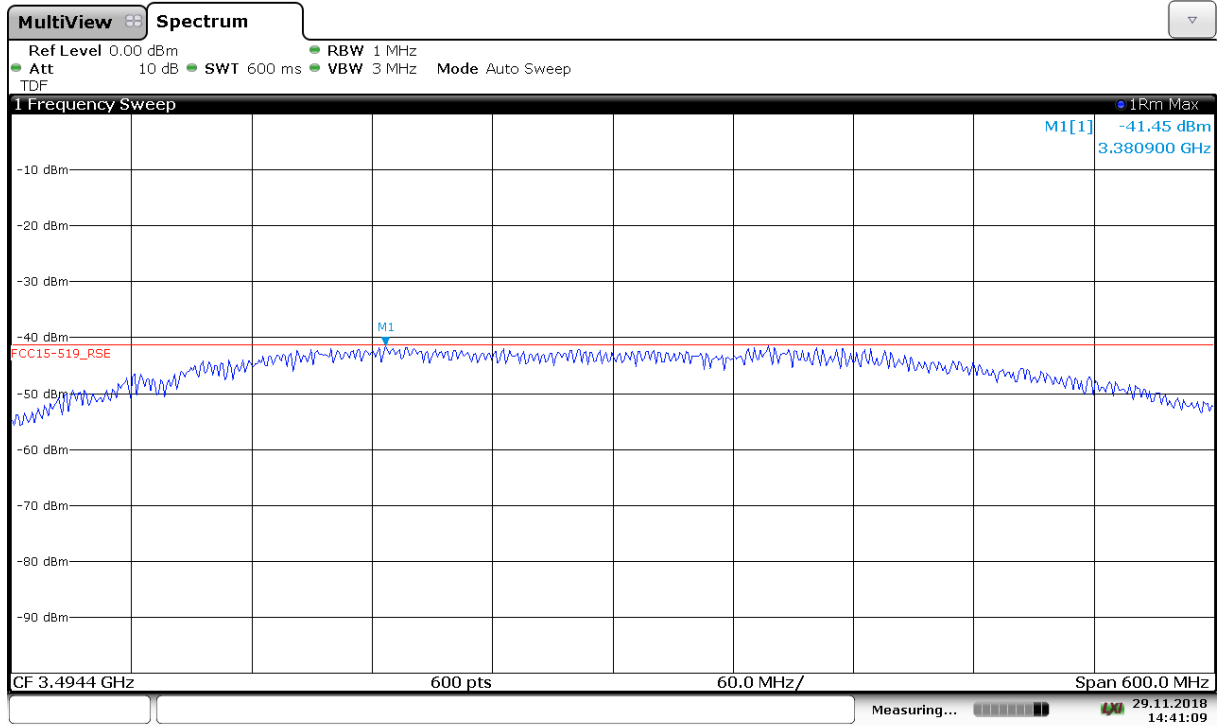
### 2.4. UWB cen. frequency with span 600 MHz, 600 pts, SWT 600 ms, op. mode 1 + 7 and op. mode 7, 4192.8 MHz – 4792.8 MHz, ANT HOR + VER



13:52:22 29.11.2018

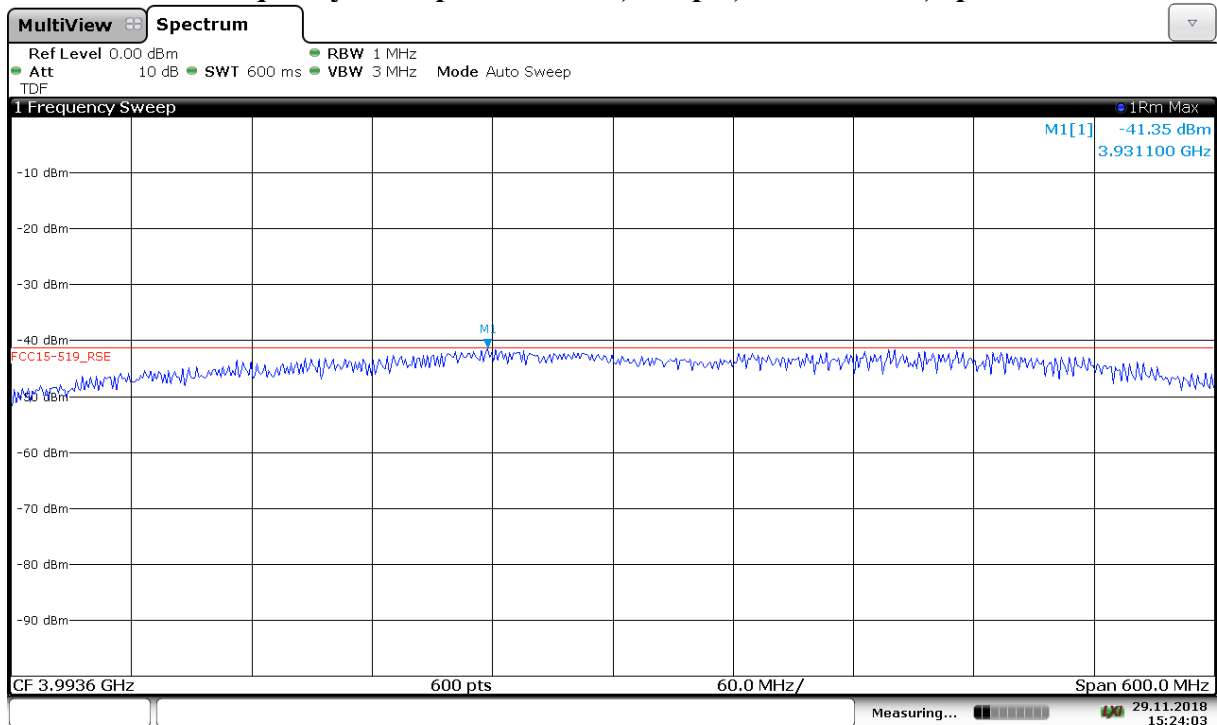


## 2.5. UWB cen. frequency with span 600 MHz, 600 pts, SWT 600 ms, op. mode 2 + 7



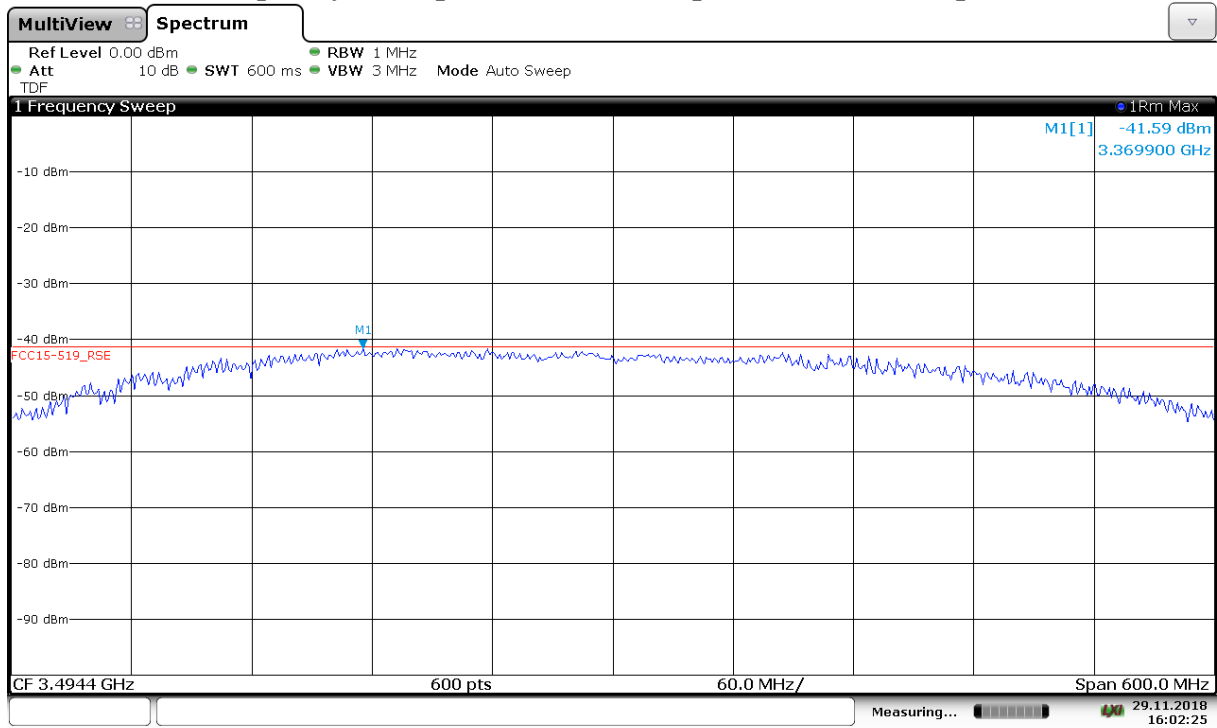
14:41:10 29.11.2018

## 2.6. UWB cen. frequency with span 600 MHz, 600 pts, SWT 600 ms, op. mode 3 + 7



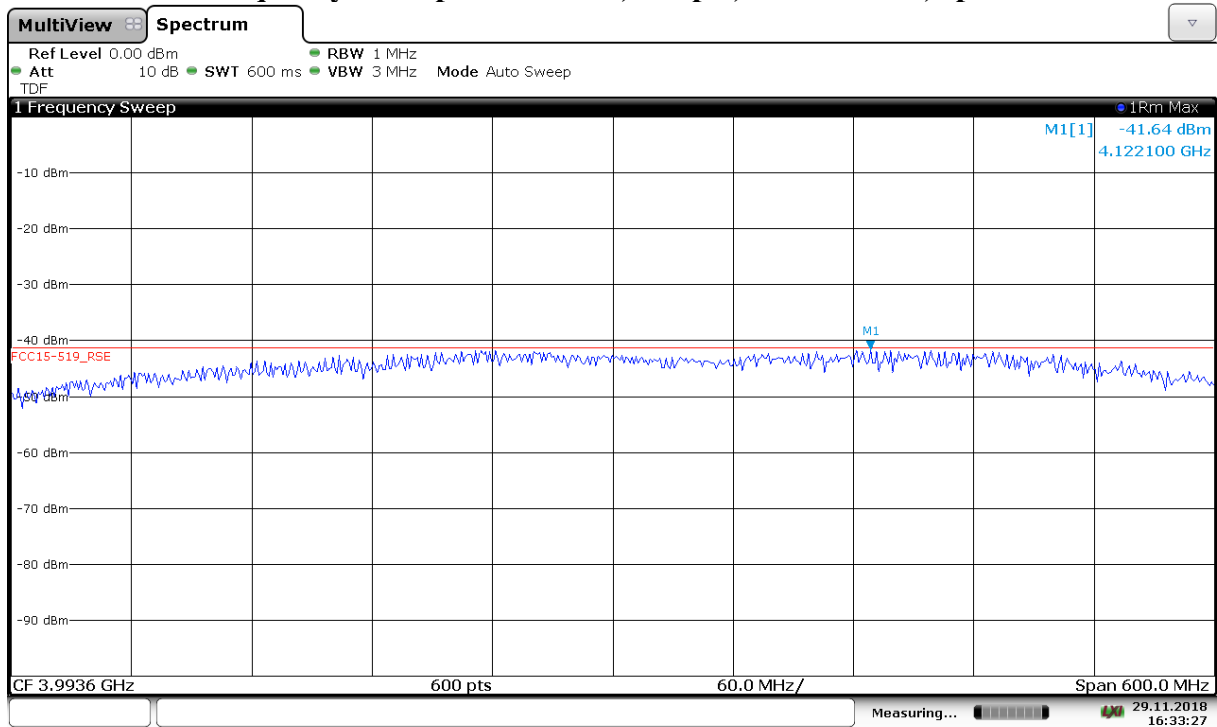
15:24:04 29.11.2018

## 2.7. UWB cen. frequency with span 600 MHz, 600 pts, SWT 600 ms, op. mode 4 + 7



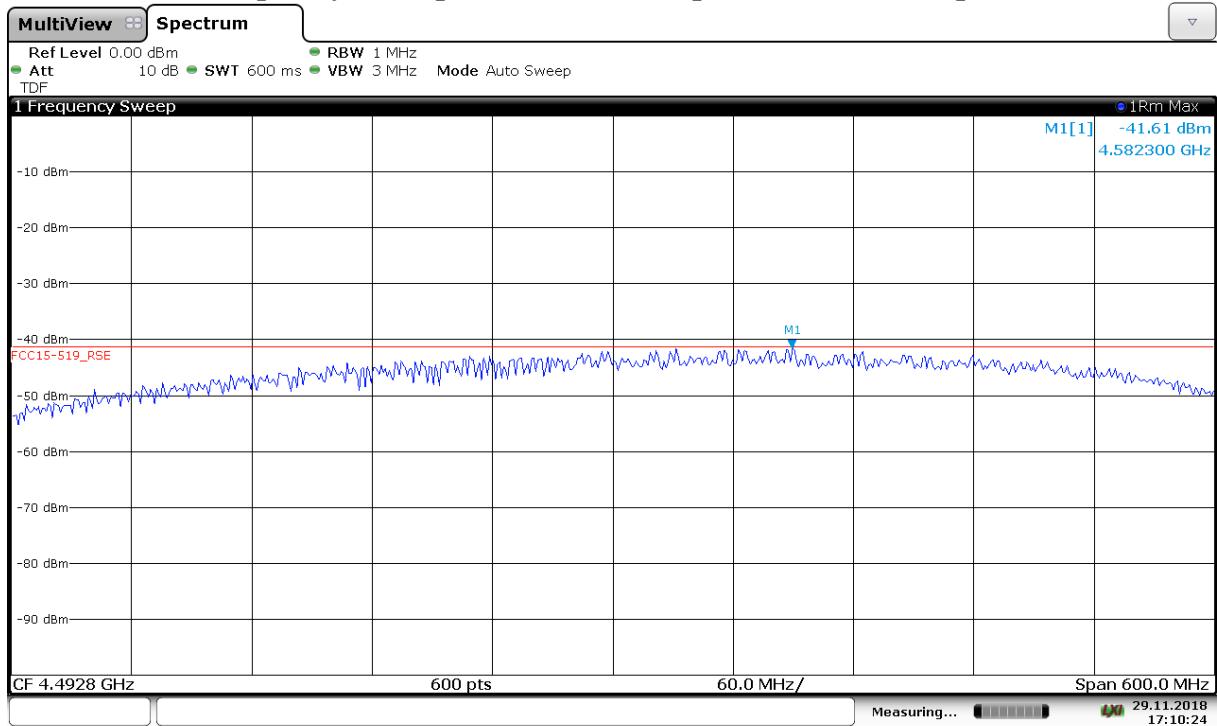
16:02:25 29.11.2018

## 2.8. UWB cen. frequency with span 600 MHz, 600 pts, SWT 600 ms, op. mode 5 + 7



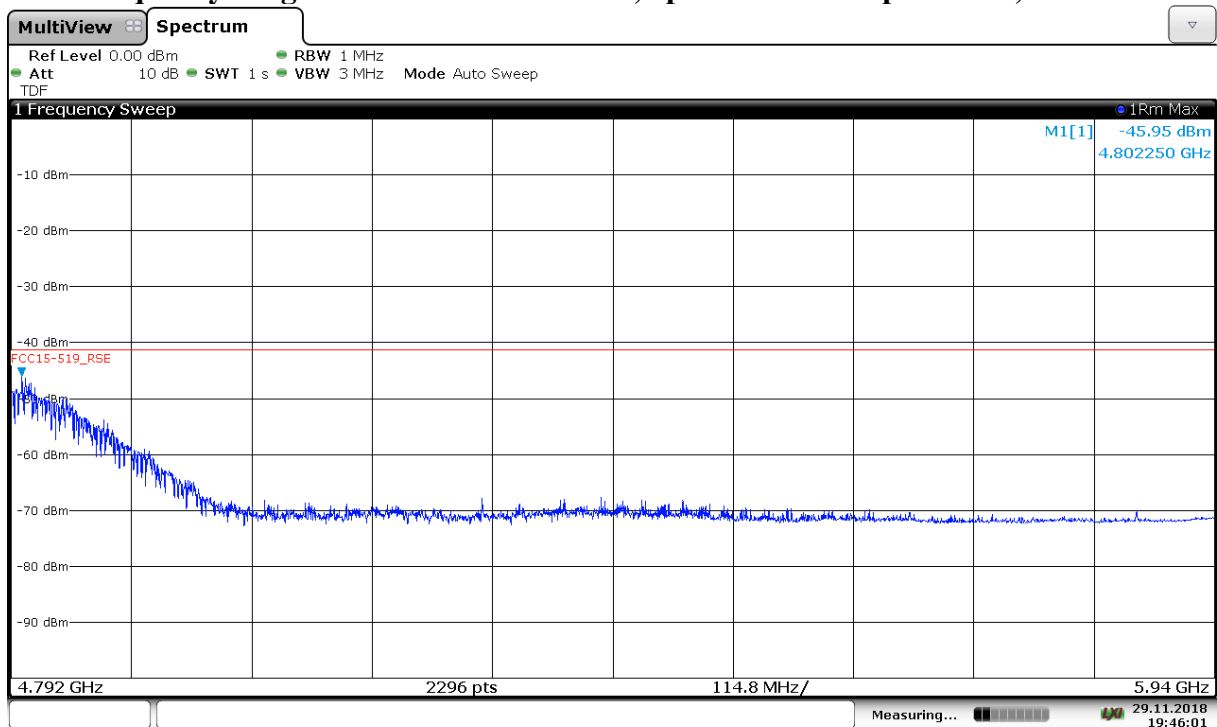
16:33:28 29.11.2018

## 2.9. UWB cen. frequency with span 600 MHz, 600 pts, SWT 600 ms, op. mode 6 + 7



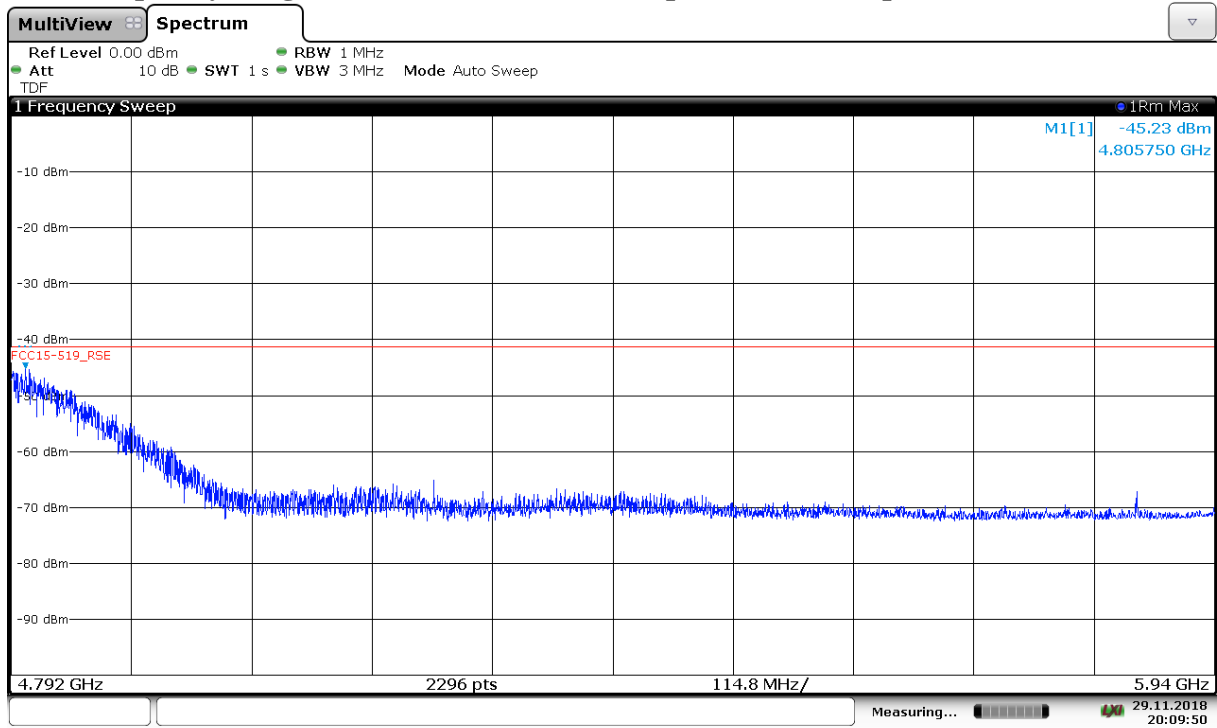
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## 2.10. Frequency range 4792 MHz – 5940 MHz, op. mode 1 and op. mode 7, ANT HOR



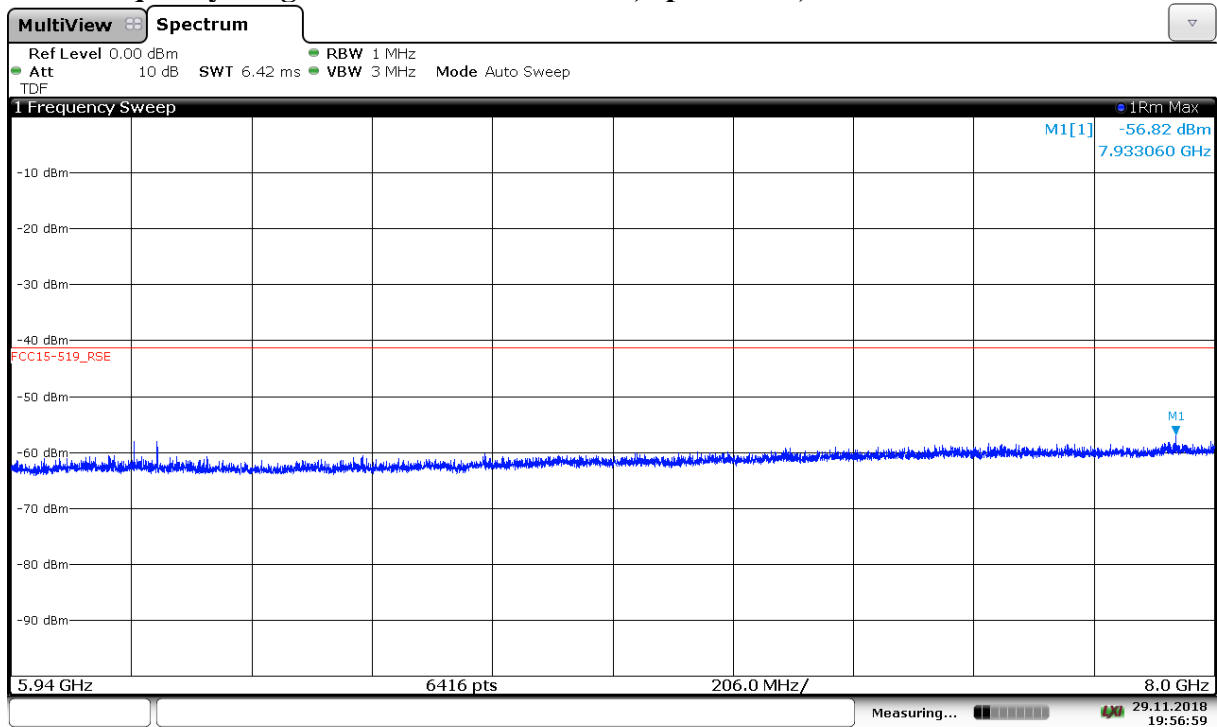
19:46:01 29.11.2018

### 2.11. Frequency range 4792 MHz – 5940 MHz, op. mode 1 and op. mode 7, ANT VER



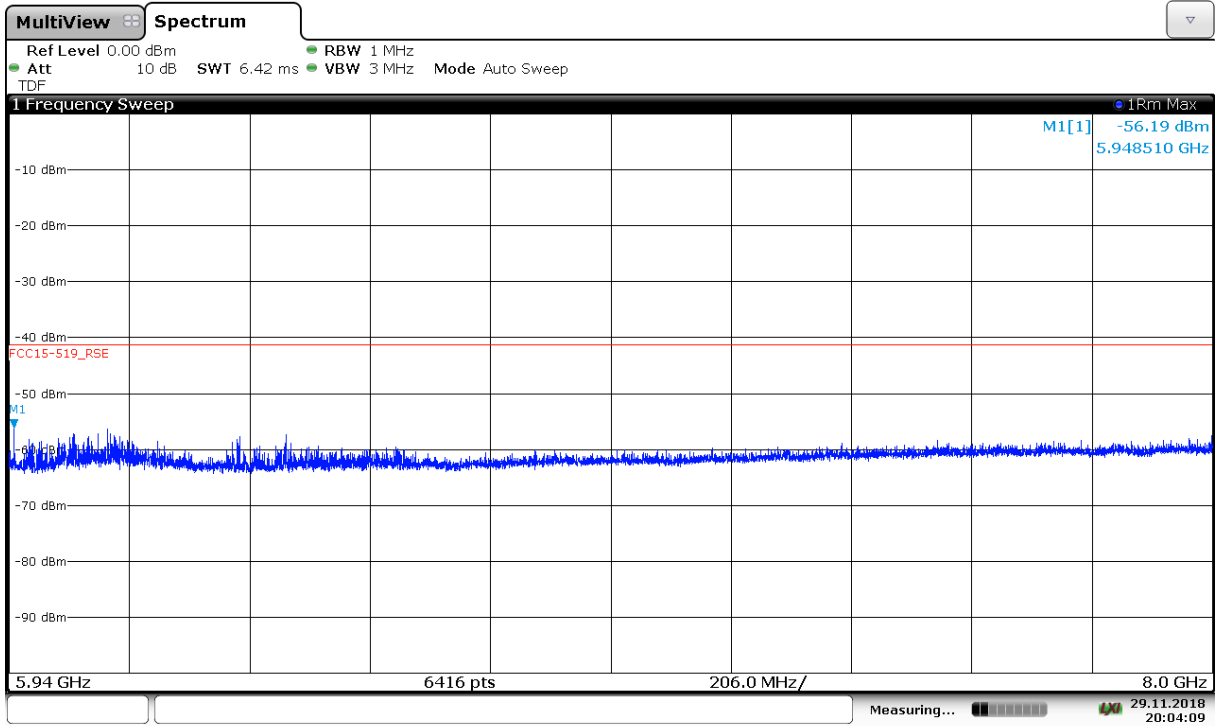
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### 2.12. Frequency range 5940 MHz – 8000 MHz, op. mode 1, ANT HOR



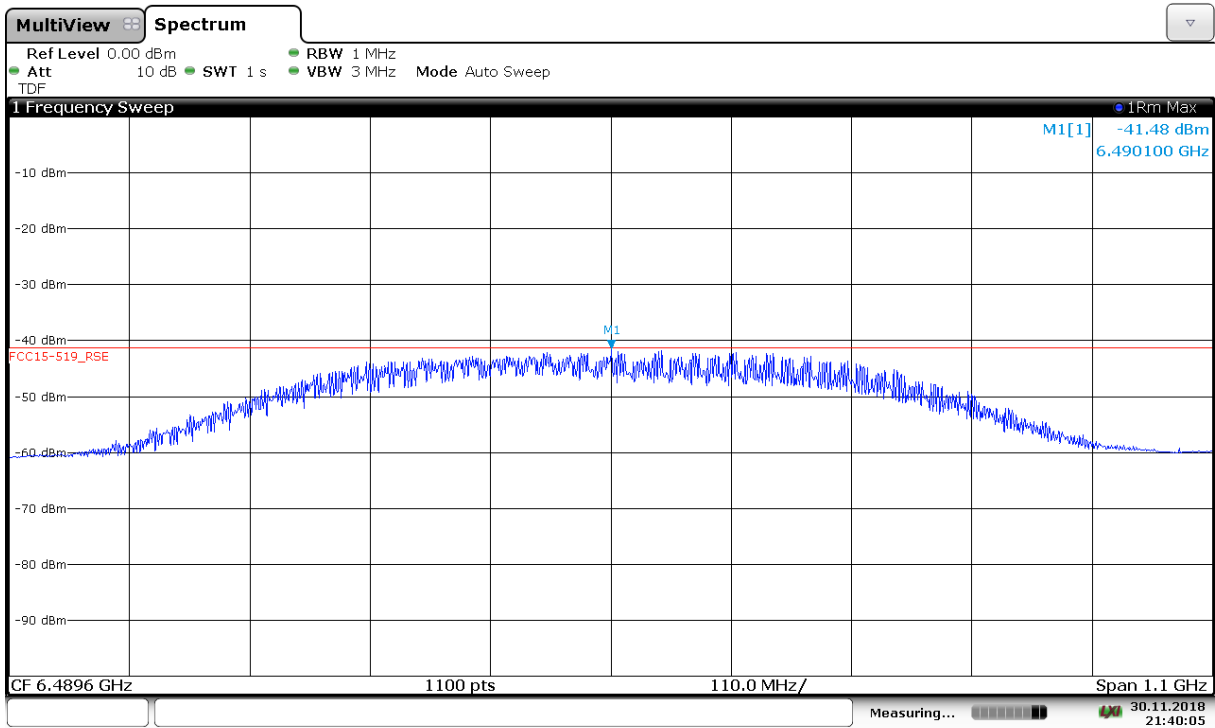
19:57:00 29.11.2018

### 2.13. Frequency range 5940 MHz – 8000 MHz, op. mode 1, ANT VER



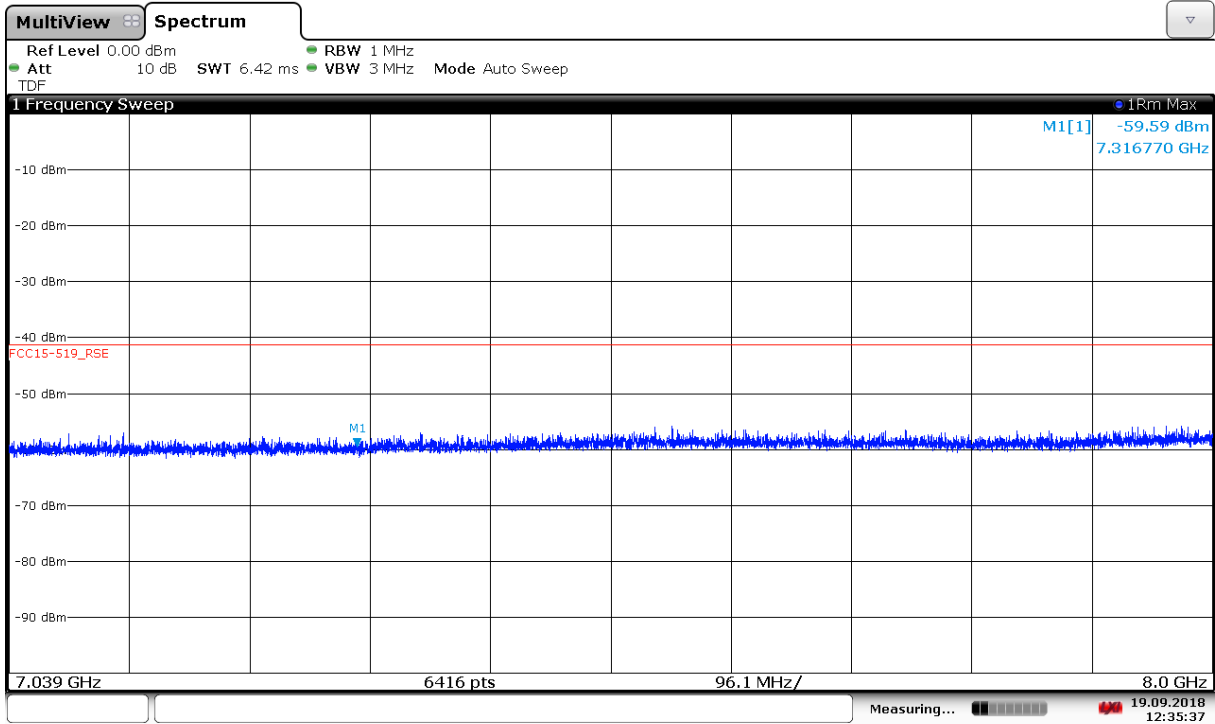
20:04:09 29.11.2018

### 2.14. UWB cen. frequency with span 1100 MHz, 1100 pts, SWT 1s, op. mode 1 and MODE 7



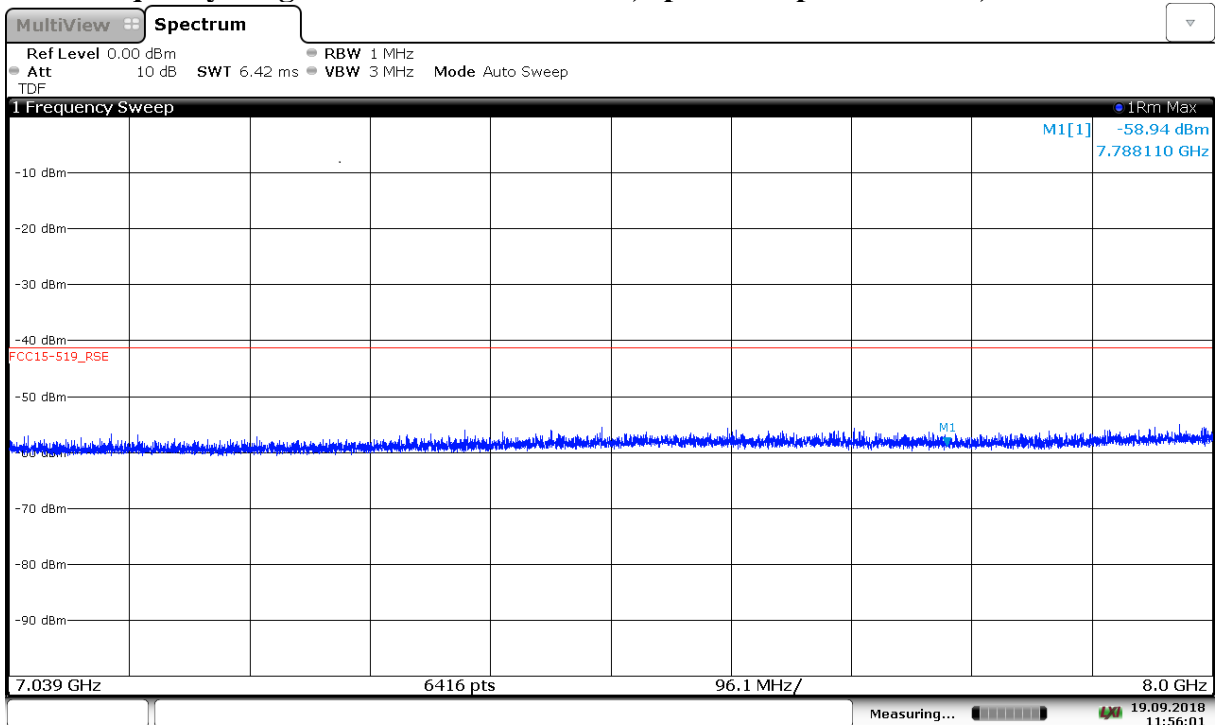
21:40:06 30.11.2018

### 2.15. Frequency range 7039 MHz – 8000 MHz, op. mode op. mode 1 + 7, ANT HOR



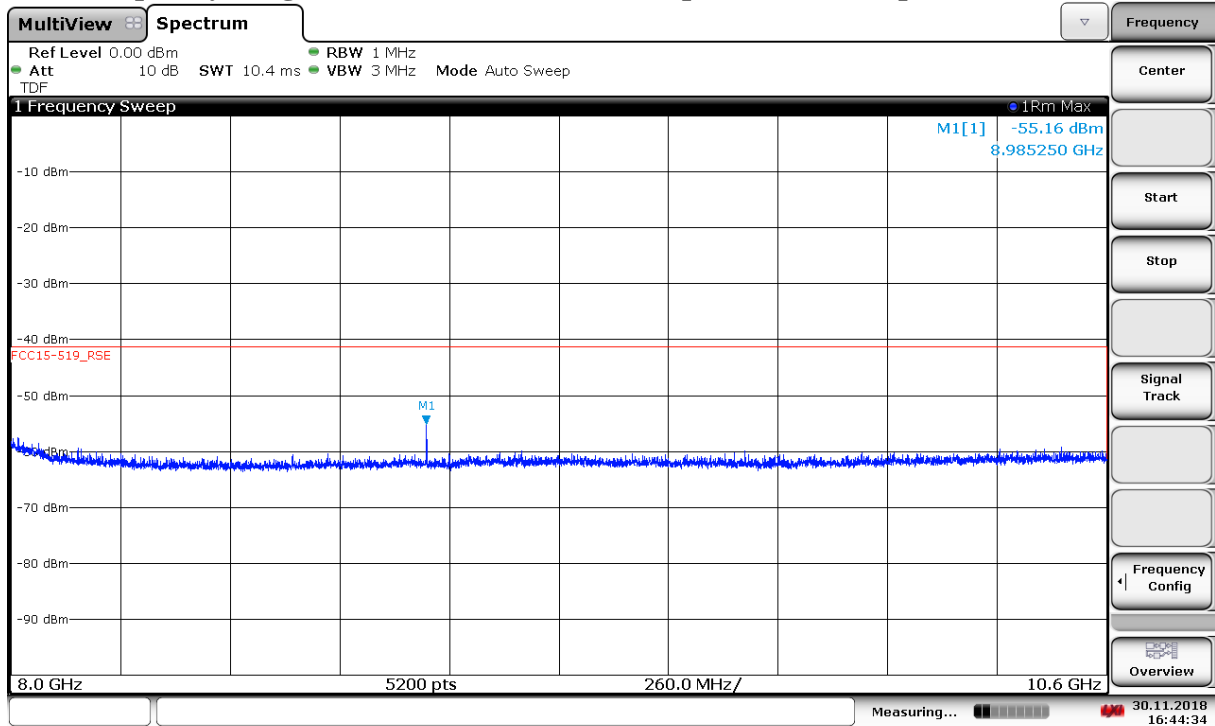
12:35:37 19.09.2018

### 2.16. Frequency range 7039 MHz – 8000 MHz, op. mode op. mode 1 + 7, ANT VER

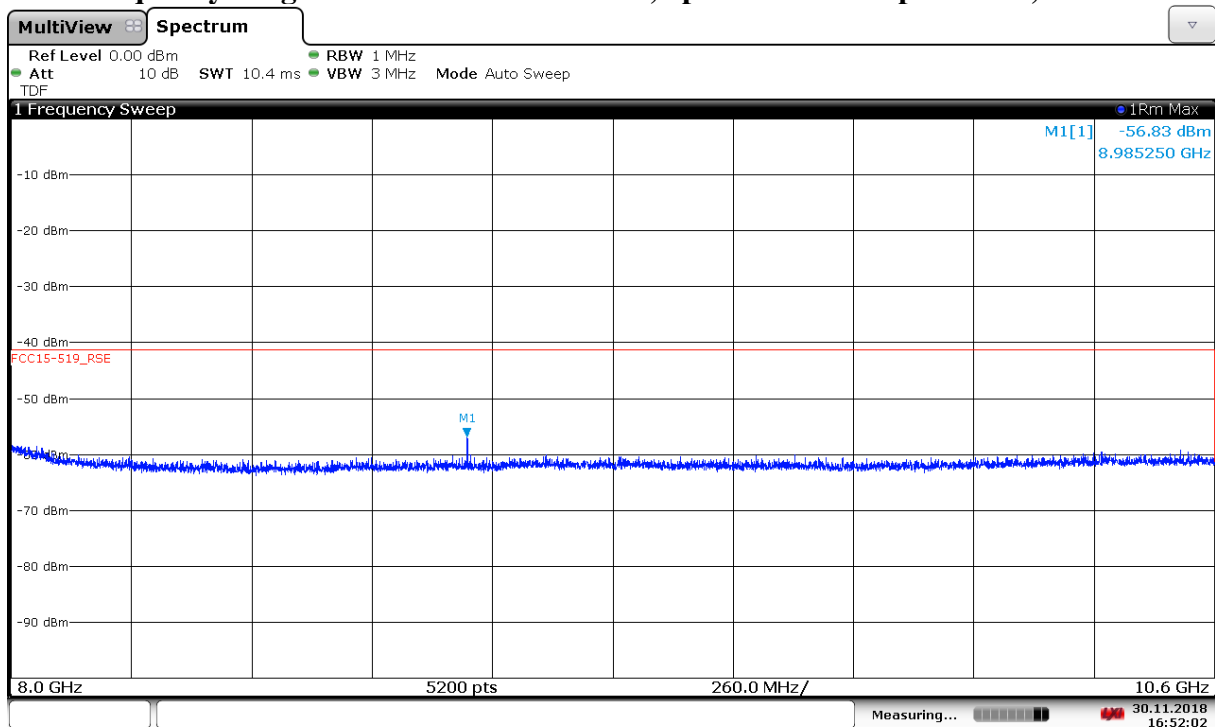


11:56:01 19.09.2018

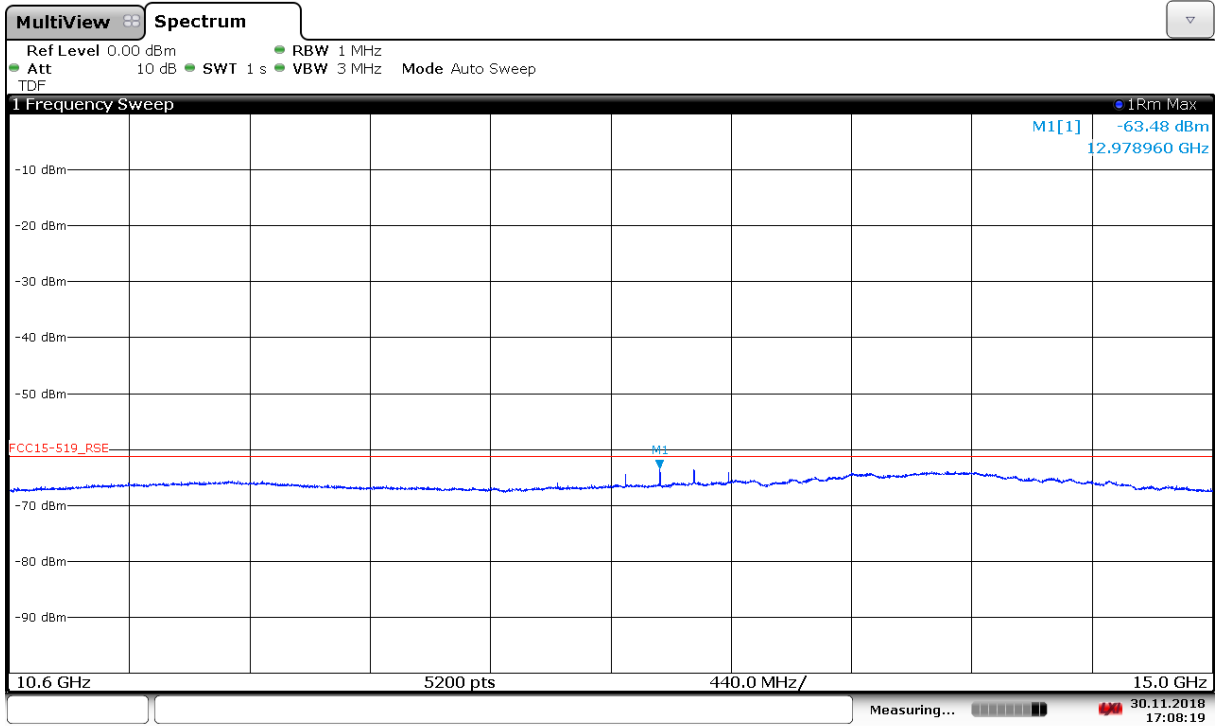
### 2.17. Frequency range 8000 MHz – 10600 MHz, op. mode 1 and op. mode 7, ANT HOR



### 2.18. Frequency range 8000 MHz – 10600 MHz, op. mode 1 and op. mode 7, ANT VER

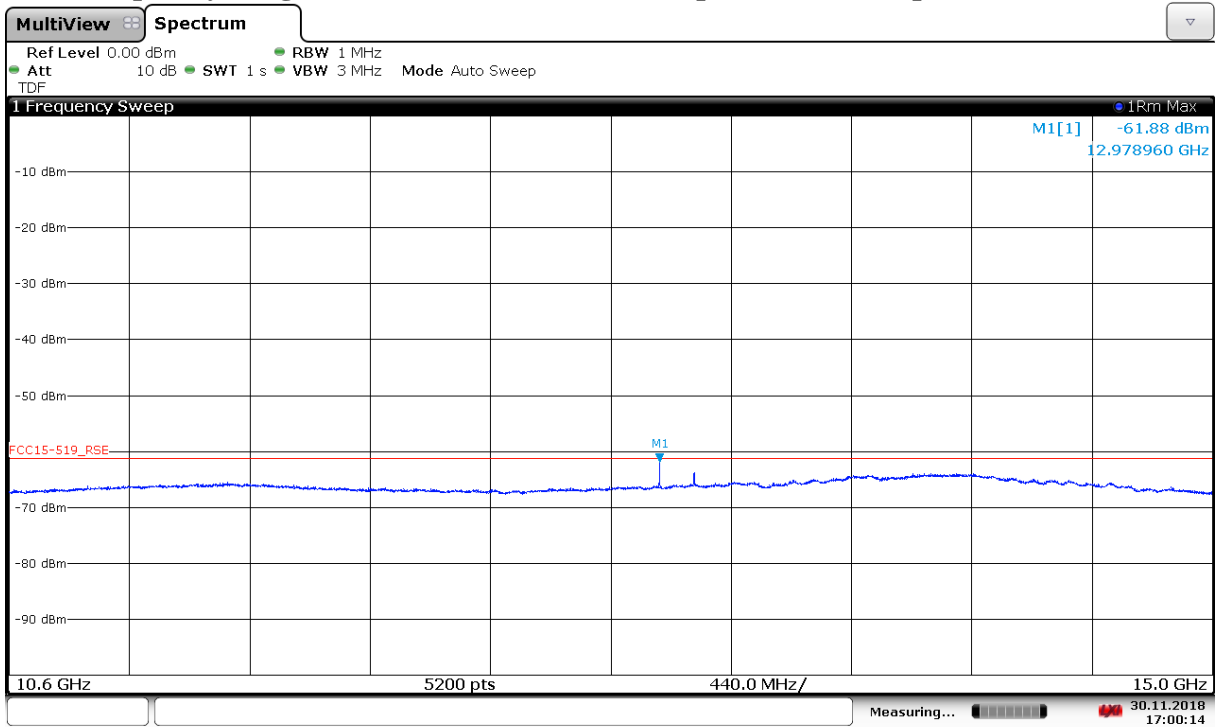


### 2.19. Frequency range 10600 MHz – 15000 MHz, op. mode 1 and op. mode 7, ANT HOR



17:08:20 30.11.2018

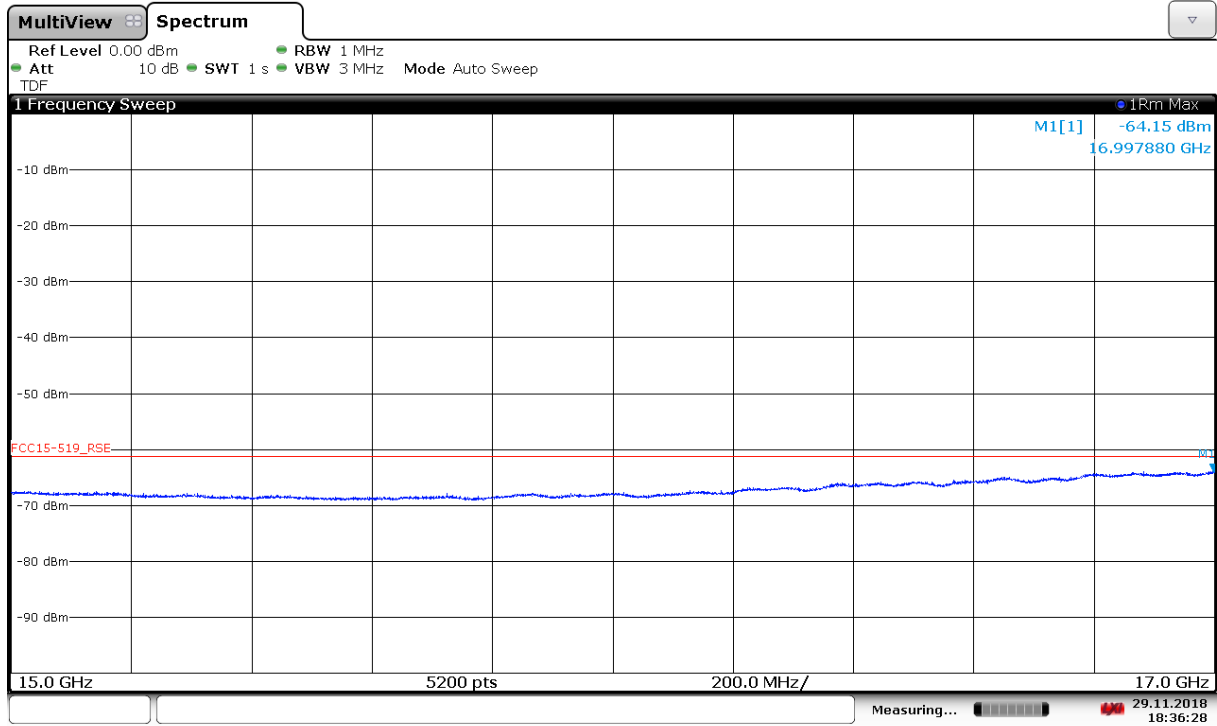
### 2.20. Frequency range 10600 MHz – 15000 MHz, op. mode 1 and op. mode 7, ANT VER



17:00:14 30.11.2018

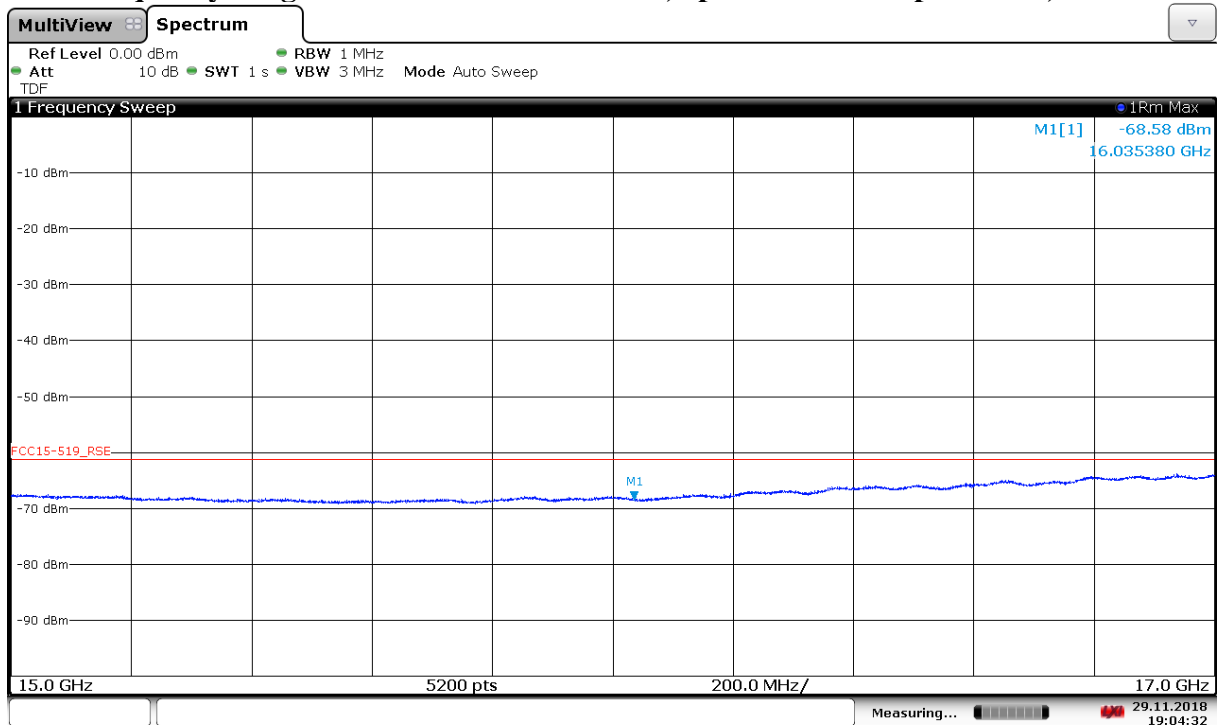


### 2.21. Frequency range 15000 MHz – 17000 MHz, op. mode 1 and op. mode 7, ANT HOR



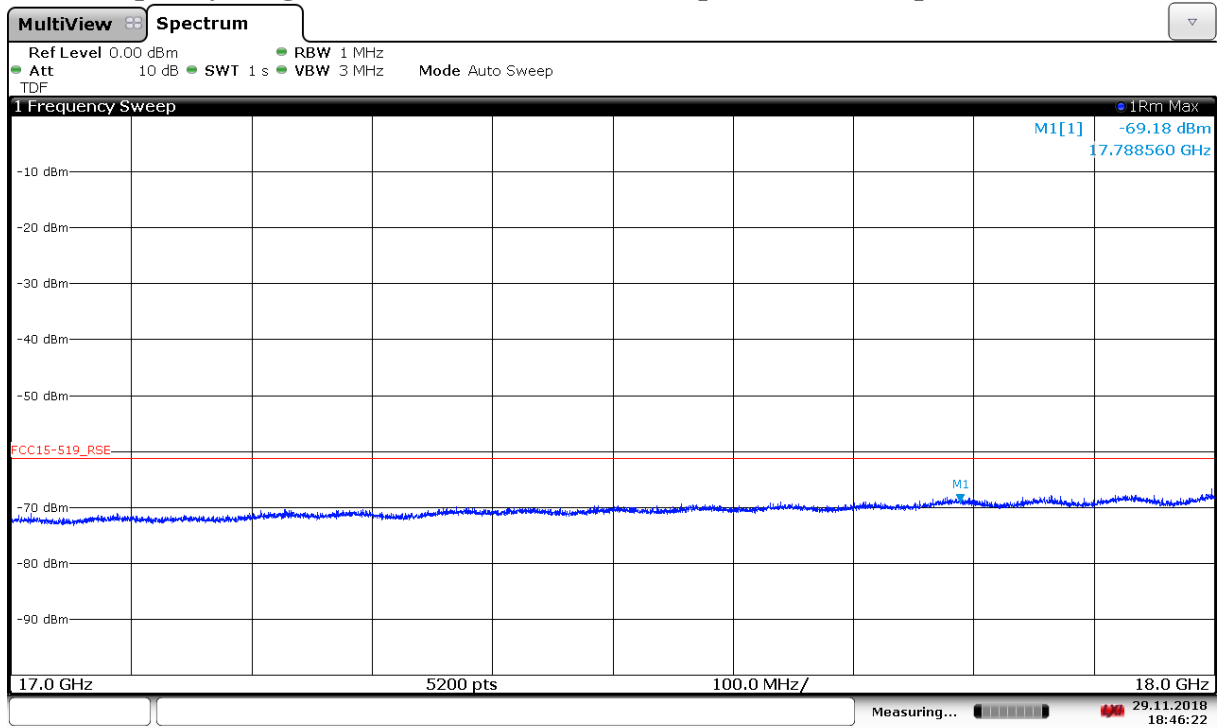
18:36:28 29.11.2018

### 2.22. Frequency range 15000 MHz – 17000 MHz, op. mode 1 and op. mode 7, ANT VER



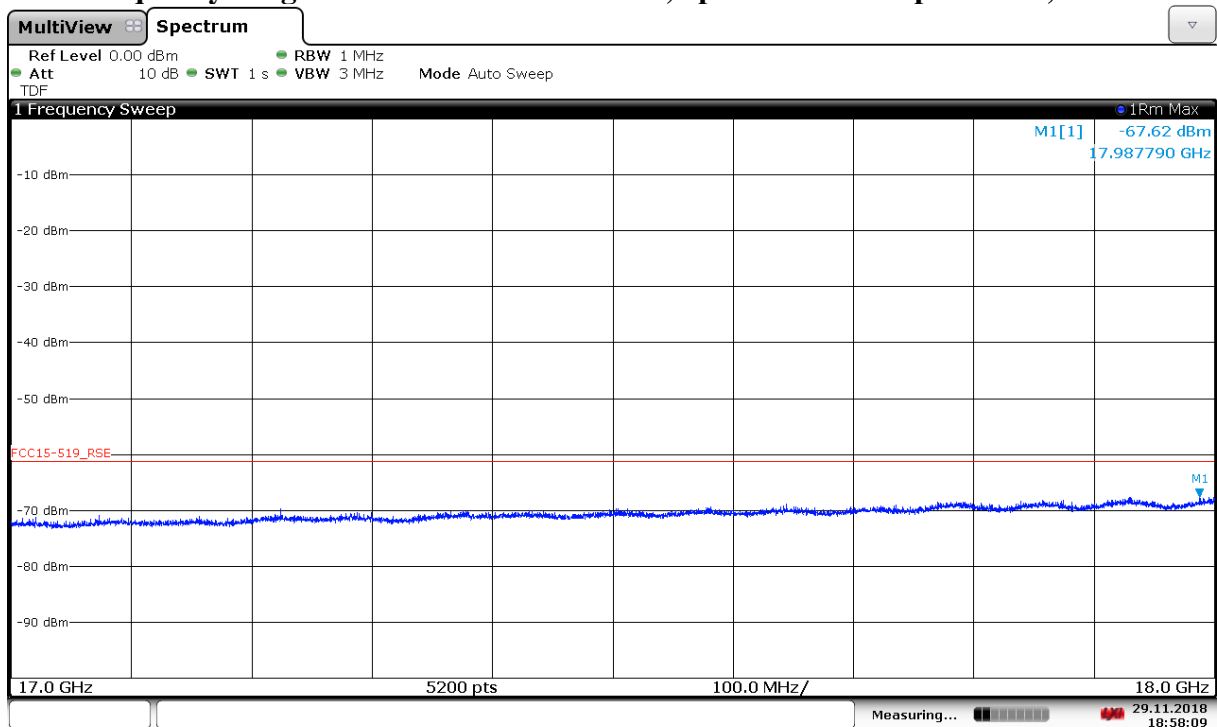
19:04:32 29.11.2018

### 2.23. Frequency range 17000 MHz – 18000 MHz, op. mode 1 and op. mode 7, ANT HOR



18:46:22 29.11.2018

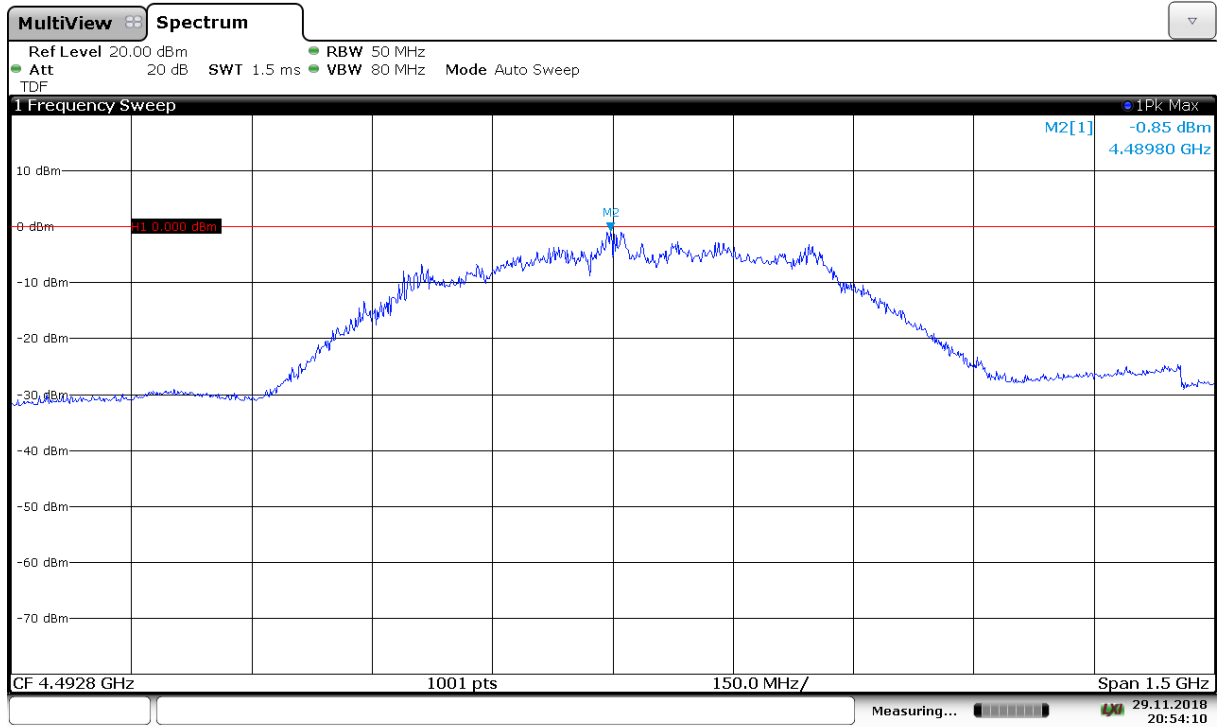
### 2.24. Frequency range 17000 MHz – 18000 MHz, op. mode 1 and op. mode 7, ANT VER



18:58:10 29.11.2018

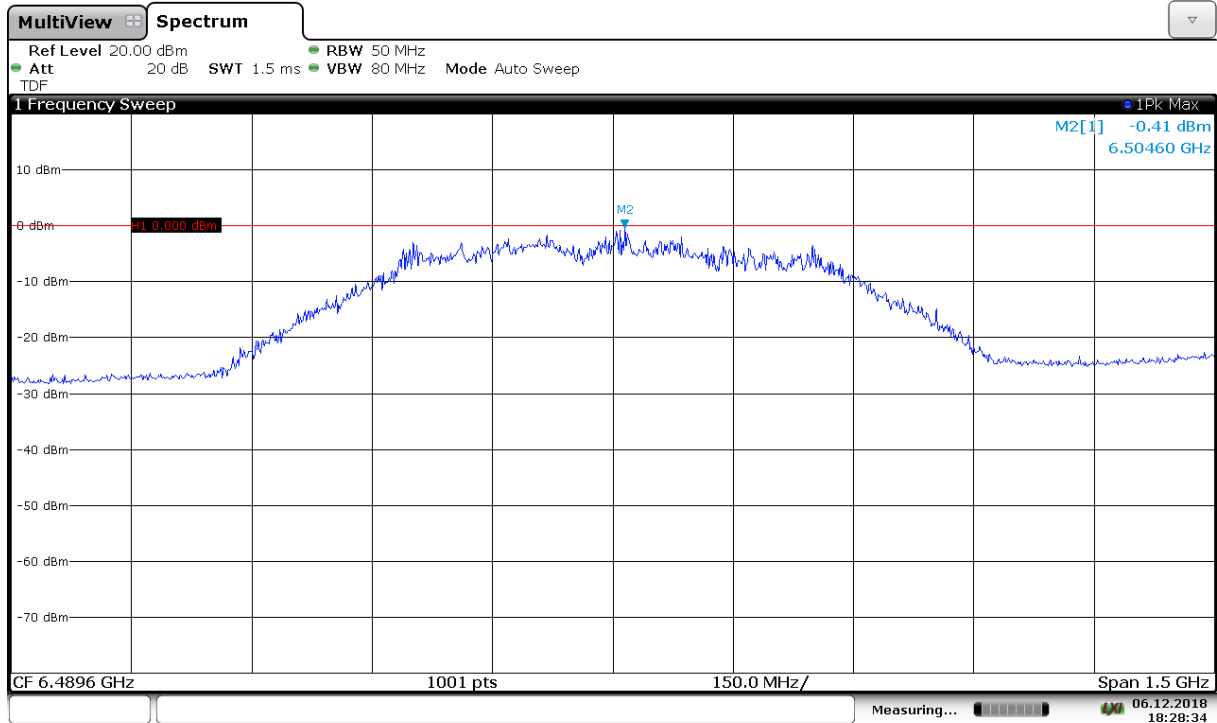
### 3. Fundamental emission peak power

#### 3.1. Fundamental emission peak power, op. mode 1, ANT HOR + VER



20:54:11 29.11.2018

#### 3.2. Fundamental emission peak power, op. mode 7, ANT HOR + VER



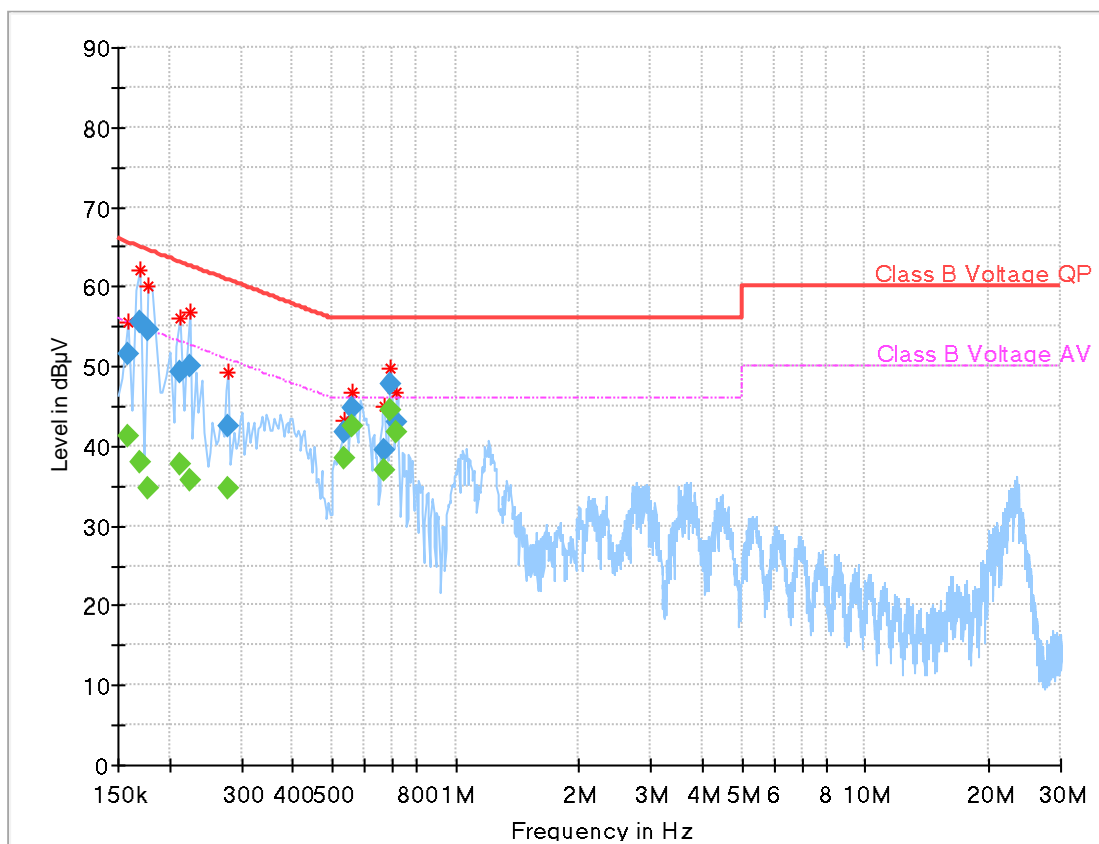
18:28:34 06.12.2018

## 4. General Limit - Conducted emissions on AC-Power lines, §15.209

### 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 15.207
Operating Mode:	1
Measured on line:	N/L1
Diagram details:	Shows the peak values as a sum of measured ports in maxhold mode
Environmental Conditions:	Humidity: 40% rH; Temperature: 22° C
Operator:	JVo
Comments:	120 V AC

Full Spectrum



**Final Result**

Frequency (MHz)	QuasiPeak (dB $\mu$ V)	CAverage (dB $\mu$ V)	Limit (dB $\mu$ V)
0.157813	---	41.13	55.58
0.157813	51.44	---	65.58
0.169531	---	38.05	54.98
0.169531	55.61	---	64.98
0.177344	54.48	---	64.61
0.177344	---	34.64	54.61
0.212500	49.23	---	63.11
0.212500	---	37.66	53.11
0.224219	49.91	---	62.66
0.224219	---	35.74	52.66
0.278906	42.47	---	60.85
0.278906	---	34.66	50.85
0.532813	---	38.41	46.00
0.532813	41.70	---	56.00
0.556250	---	42.39	46.00
0.556250	44.81	---	56.00
0.669531	---	36.97	46.00
0.669531	39.45	---	56.00
0.692969	---	44.51	46.00
0.692969	47.73	---	56.00
0.720313	---	41.66	46.00
0.720313	42.92	---	56.00