

Annex 1: Measurement diagrams 20-1-0194901T12a-A1

Number of pages:	15	Date of Report:	2021-Nov-17
Testing company:	CETECOM GmbH Im Teelbruch 116 45219 Essen Germany Tel. + 49 (0) 20 54 / 95 19-0 Fax: + 49 (0) 20 54 / 95 19-150	Applicant:	OÜ Eliko Tehnoloogia Arenduskeskus
Product: Model:	Positioning device ELIKO ANCHOR		
FCC ID:	2AF2I-ANCHOR Contains FCC ID: 2AC7Z- ESPWROOM32D	IC:	---
Testing has been carried out in accordance with:	CFR Title 47, Chapter I, Subchapter A, Part 15, Subpart C, §15.247 And Subpart F, §15.517 (Simultaneous transmissions)		



Table of Contents

1 Measurement diagrams.....3

1 Measurement diagrams

D13_002a_RSE_UWBCh4_WLANCh6_1Mbit_9kHz_30MHz_L aying

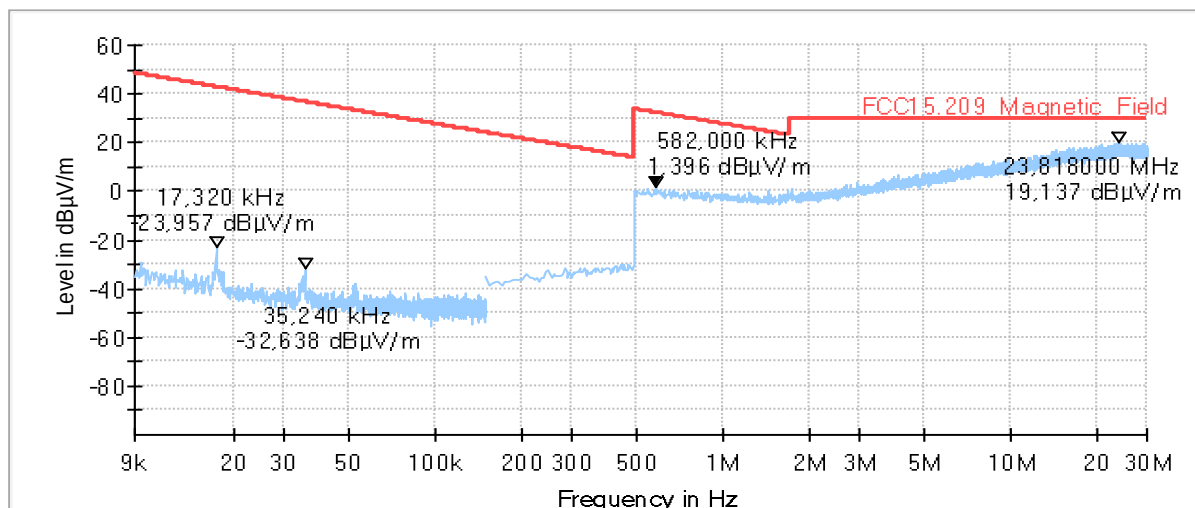
Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site Location:	Ref.-Nr. 441 Semi Anechoic Chamber (SAC1) with 3 m measurement distance
Version of Testsoftware:	EMC32 V10.50.0
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 Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	SOz
Operating Mode:	UWB: CH 04 + Wifi Ch6/B-Mode/1Mbps
Power during tests:	48V DC
Environmental Conditions:	Humidity : 50%rH; Temperature: 21°C
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT number: 20-1-01949S51_C02

Full Spectrum



D13_002b_RSE_UWBCh4_WLANCh6_1Mbit_9kHz_30MHz_ Standing

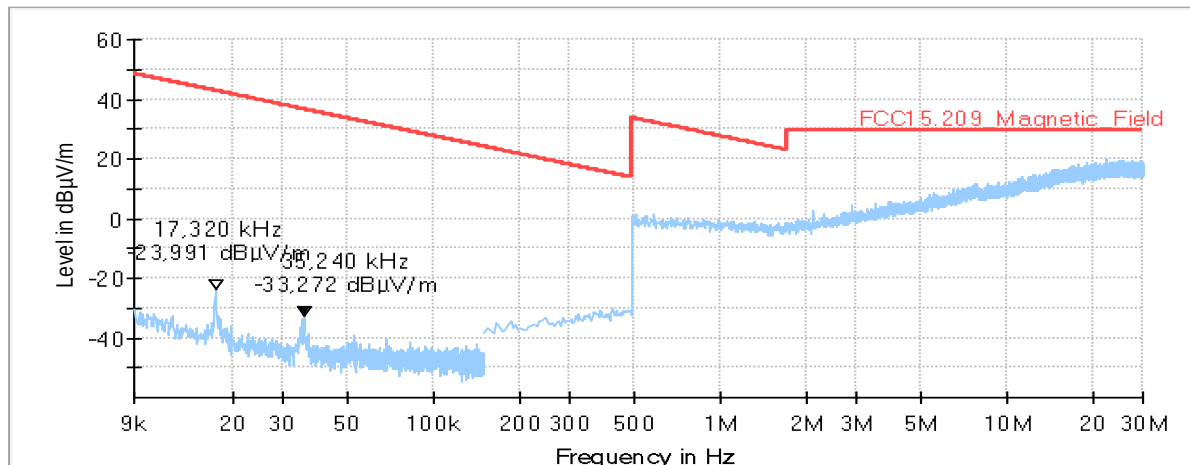
Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site Location:	Ref.-Nr. 441 Semi Anechoic Chamber (SAC1) with 3 m measurement distance
Version of Testsoftware:	EMC32 V10.50.0
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 Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	SOz
Operating Mode:	UWB: CH 04 + Wifi Ch6/B-Mode/1Mbps
Power during tests:	48V DC
Environmental Conditions::	Tnom, Vnom
EUT Setup:	1
Verdict:	Passed
Comment:	

EUT Information

PMT number:	20-1-01949S51_C02
-------------	-------------------

Full Spectrum



D13_001a_RSE_UWBCh4_WLANCh6_1Mbit_30MHz_1GHz_Laying

Common Information

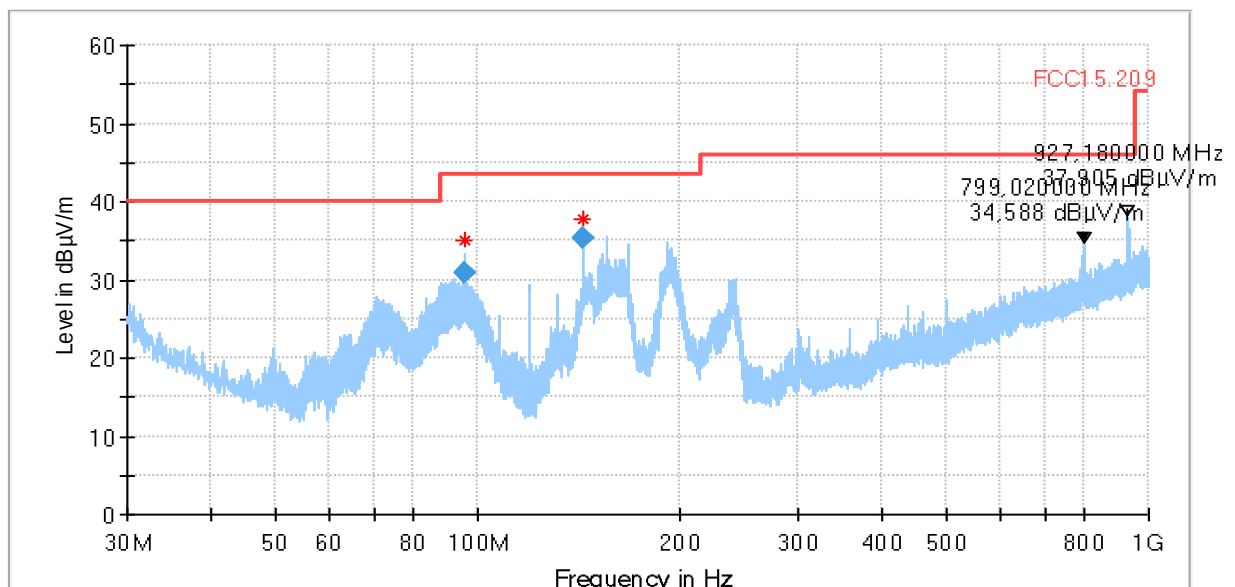
Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 & RSS Gen. Issue 5
Antenna polarisation:	horizontal/vertical
Environmental Conditions::	Humidity : 50%rH; Temperature: 21°C
Operating Mode:	UWB: CH 04 + Wifi Ch6/B-Mode/1Mbps
Power supply:	48V DC
Comment:	Channel no. mid
Verdict:	Passed

EUT Information

PMT number:	20-1-01949S51_C02
-------------	-------------------

Full Spectrum

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Sig Path (dB)	Preamplifier (dB)	Trd Corr. (dB/m)
95.639000	30.93	43.50	12.57	120.000	120.0	V	230.0	8.2	0.0	0.9	7.3
143.465000	35.25	43.50	8.25	120.000	112.0	V	136.0	8.7	0.0	1.1	7.6

D13_001b_RSE_UWBCh4_WLANCh6_1Mbit_30MHz_1GHz_ Standing

Common Information

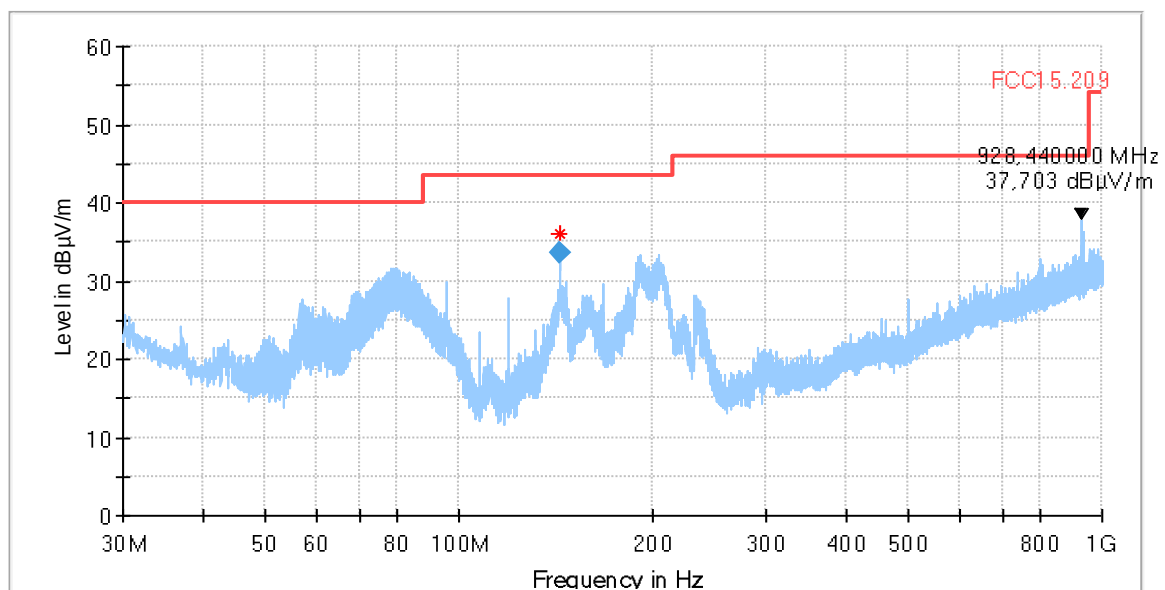
Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 & RSS Gen. Issue 5
Environmental Conditions:	Humidity : 50%rH; Temperature: 21°C
Operating Mode:	UWB: CH 04 + Wifi Ch6/B-Mode/1Mbps
Power supply:	
Comment:	Channel no. mid
Verdict:	Passed

EUT Information

PMT number:	20-1-01949S51_C02
-------------	-------------------

Full Spectrum

Full Spectrum



Final Result

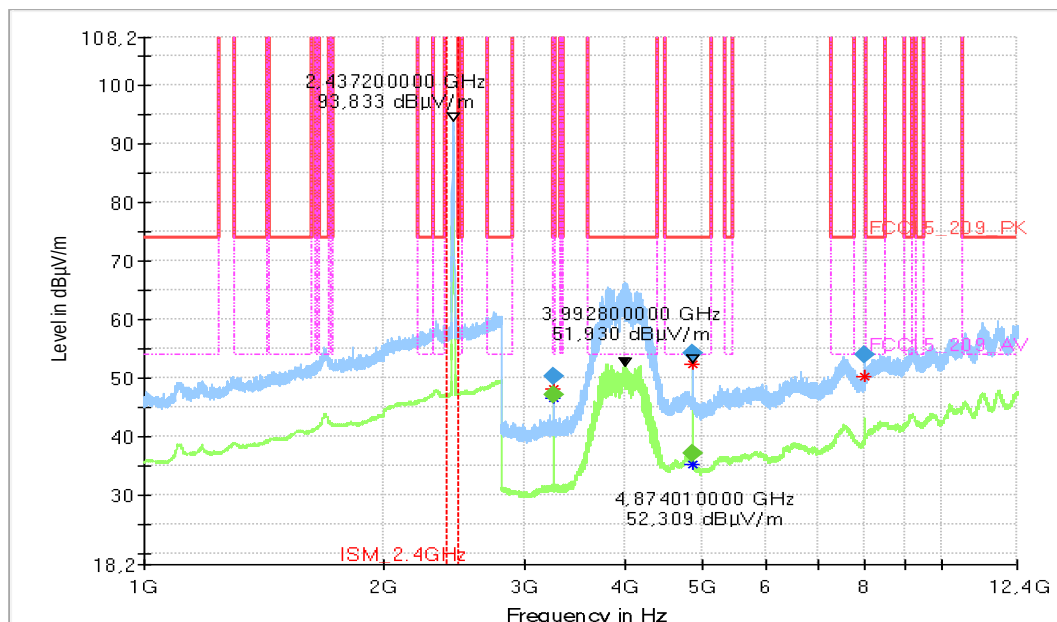
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Sig Path (dB)	Preamplifier (dB)	Trd Corr. (dB/m)
143.465000	33.69	43.50	9.81	120.000	105.0	V	294.0	8.7	0.0	1.1	7.6

D12_003_RSE_UWBCh4_WLAnCh6_1Mbit_1G_12_4G

Common Information

Test Description:	Band-Edge: Radiated Field Strength Emissions Emissions in 3m distance
Test Site:	Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue5
Antenna polarisation:	horizontal/vertical
Operating Mode:	UWB: CH 04 + Wifi Ch6/B-Mode/1Mbps
Operator:	Lor
Comment:	48V DC over Ethernet cable
EUT Setup:	1
Sample No.	S51_C02
Verdict:	Passed

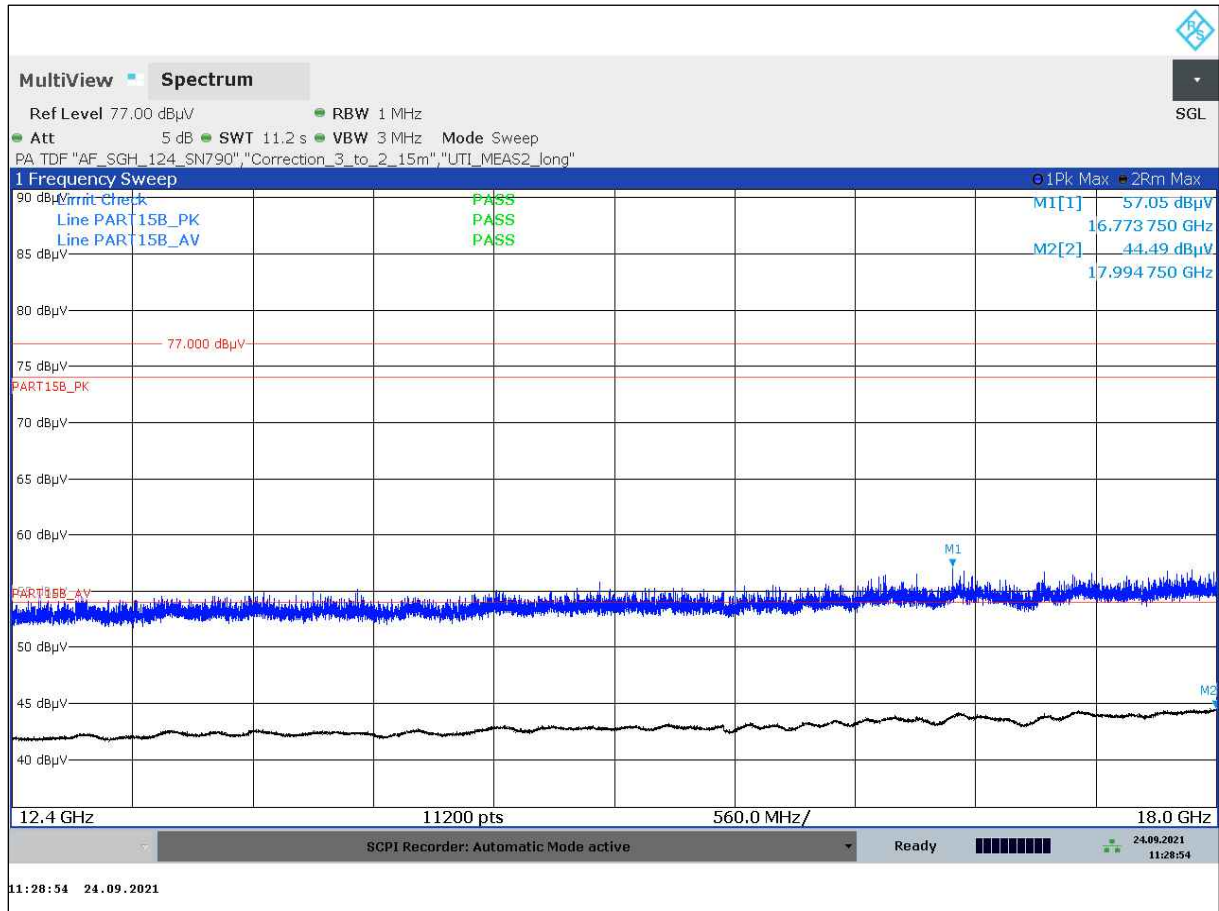
Full Spectrum



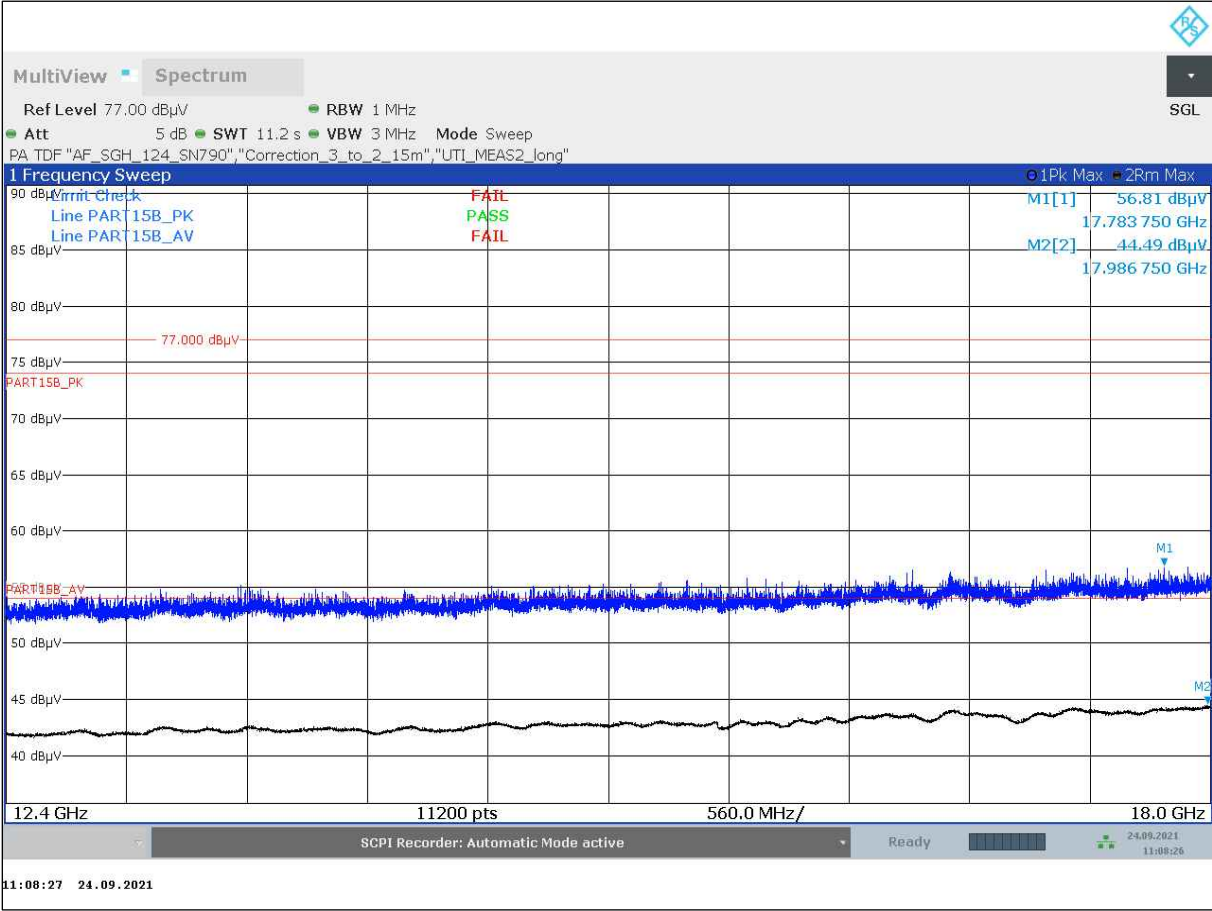
Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin	Meas. Time (ms)	Bandwidth (h)	Height	Pol	Azimuth	Elevation
3249.330000	---	47.05	150.00	102.95	100.0	1000.000	155.0	H	273.0	0.0
3249.330000	50.34	---	150.00	99.66	100.0	1000.000	155.0	H	276.0	0.0
4874.010000	---	37.26	54.00	16.74	100.0	1000.000	155.0	H	314.0	90.0
4874.010000	54.22	---	74.00	19.78	100.0	1000.000	155.0	H	313.0	90.0
7987.210000	54.02	---	150.00	95.98	100.0	1000.000	155.0	H	90.0	0.0

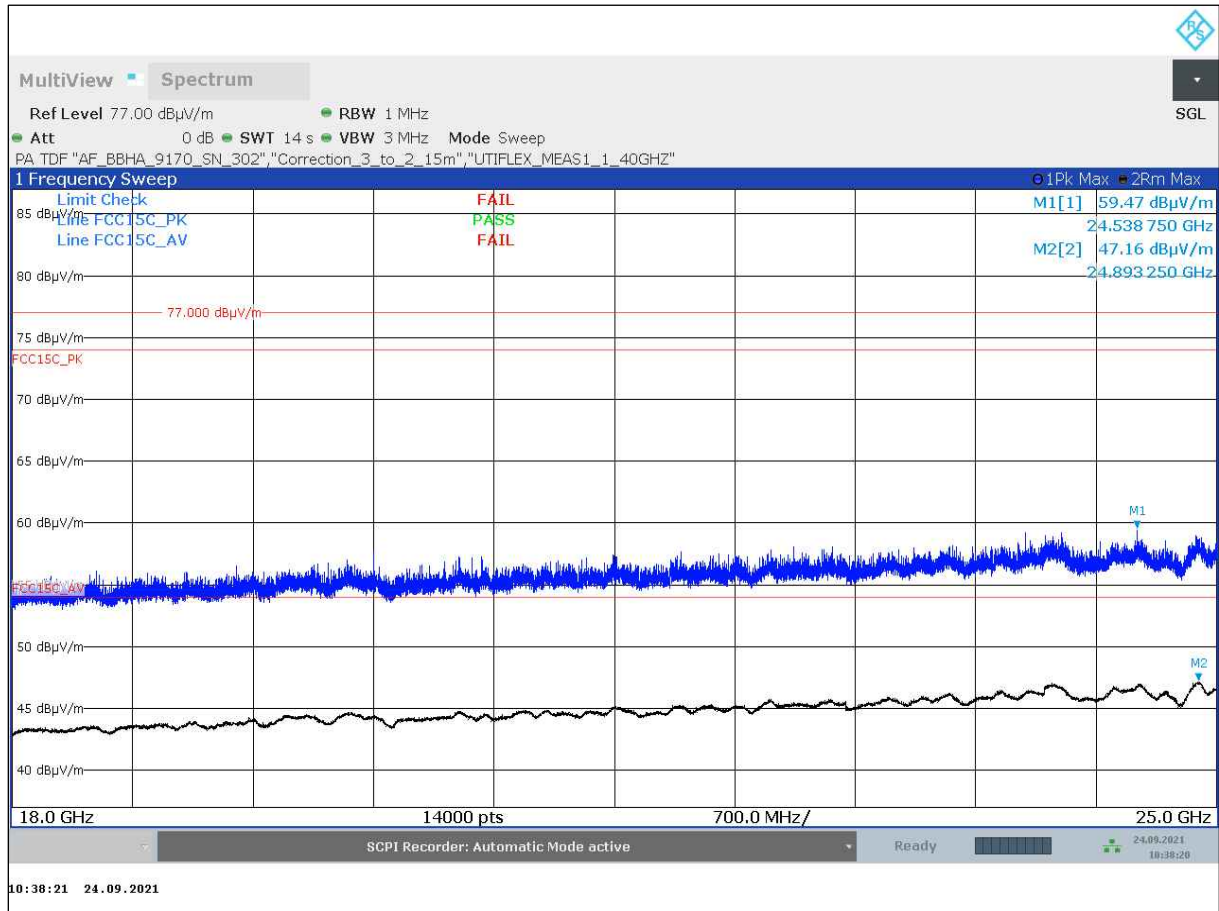
D12_002a_RSE_UWBCh4_WLANCh6_1Mbit_12_4G_18G_AntH



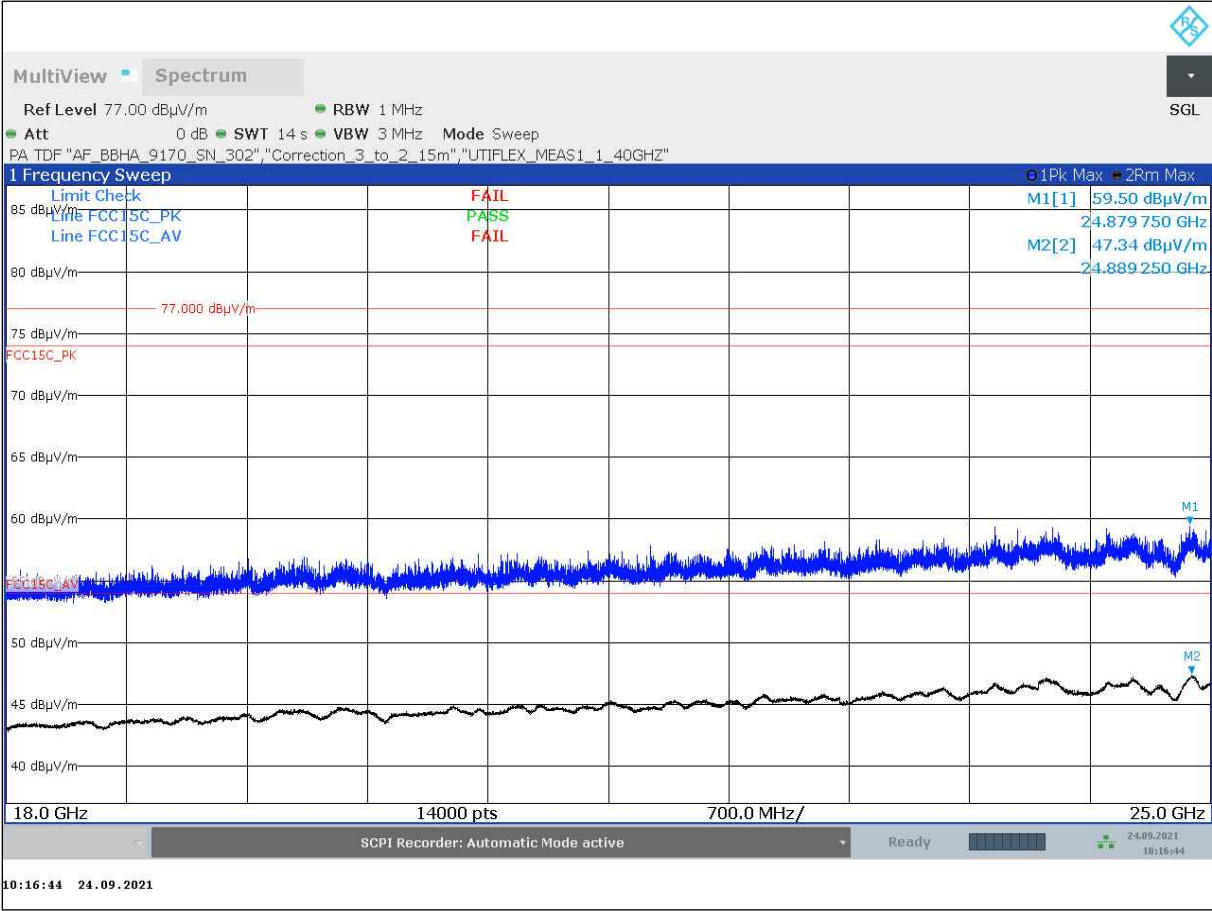
D12_002b_RSE_UWBCh4_WLANCh6_1Mbit_12_4G_18G_AntV



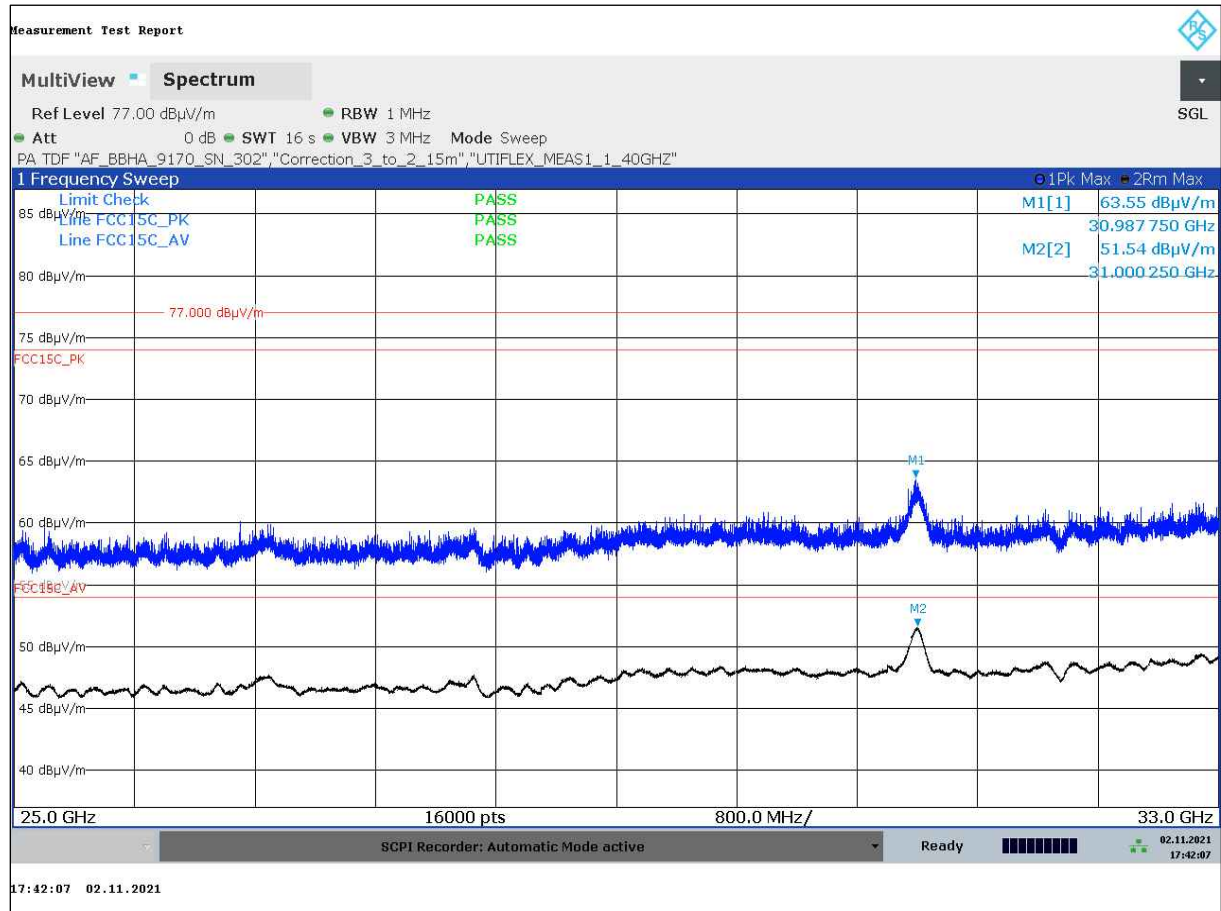
D12_001a_RSE_UWBCh4_WLANCh6_1Mbit_Anth



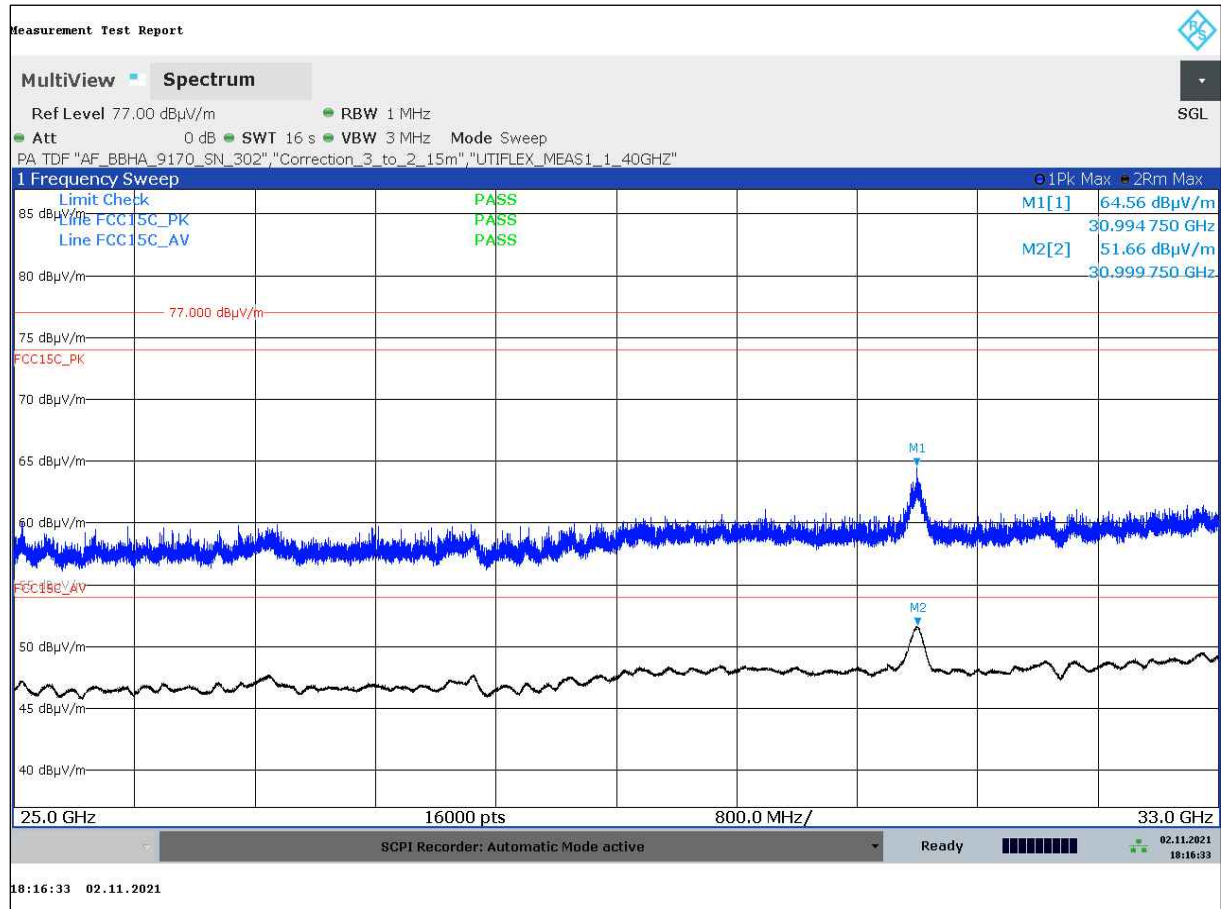
D12_001b_RSE_UWBCh4_WLANCh6_1Mbit_AntV



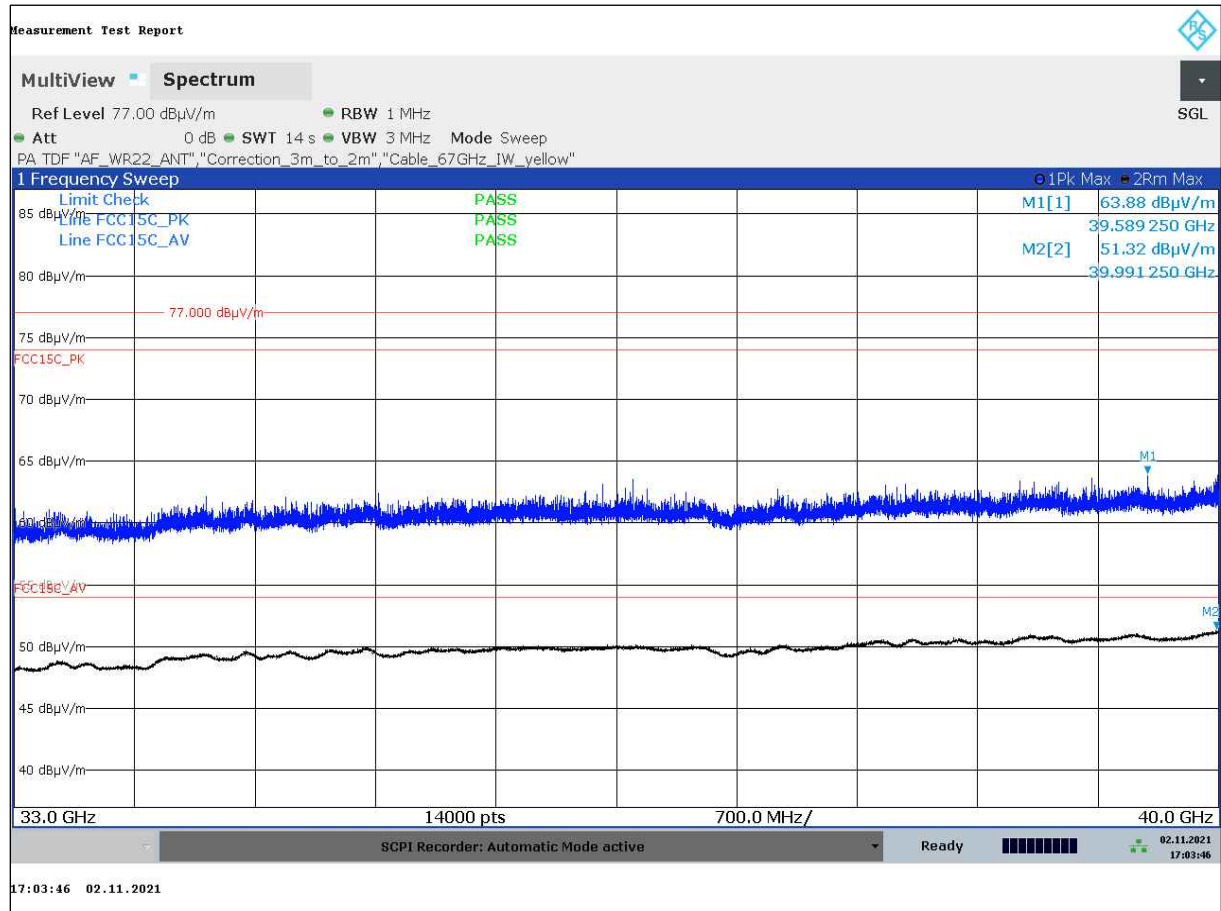
D12_006a_RSE_UWB_Ch4_WLAN_Ch6_1Mbit_25G_33GHz_AntH



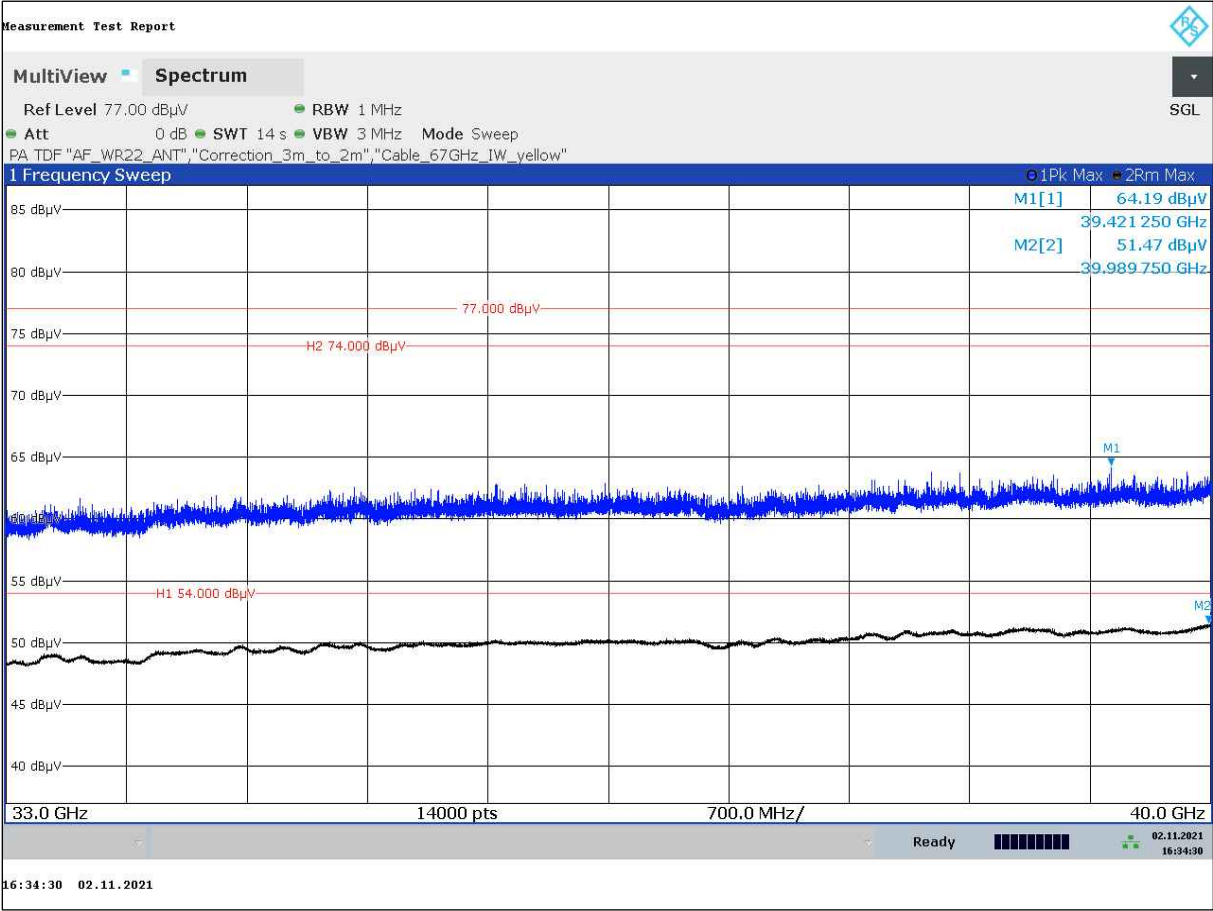
D12_006b_RSE_UWB_Ch4_WLAN_Ch6_1Mbit_25G_33GHz_AntV



D12_005a_RSE_UWB_Ch4_WLAN_Ch6_1Mbit_33G_40GHz_AntH



D12_005b_RSE_UWB_Ch4_WLAN_Ch6_1Mbit_33G_40GHz_AntV



End Of Annex 1