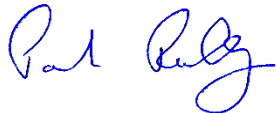


**Confidential Report**

<b>Project Num</b>	20E8588-2a Part 2 of 2
<b>Quotation</b>	Q19-2805-1
<b>Prepared For</b>	Nordic ID Oy
<b>Company Address</b>	Joensuunkatu 7E Fi-24100 Salo, Finland
<b>Contact</b>	Rauno Nikkilä
<b>Contact Email</b>	rauno.nikkila@nordicid.com
<b>Contact Phone</b>	+358 (0)50 5689803
<b>Prepared By</b>	Compliance Engineering Ireland
<b>Test Lab Address</b>	Clonross Lane, Derrockstown, Dunshaughlin, Co. Meath, Ireland
<b>Tested By</b>	Michael Kirby
<b>Test Report By</b>	Michael Kirby
<b>FCC Test Firm Registration</b>	409640
<b>IC Site Registration</b>	
<b>Date</b>	23 <sup>rd</sup> Mar 2020
<b>EUT Description</b>	Nordic ID HH83 RFID ACD, Model 837-2A
<b>Authorised by</b>	<b>Paul Reilly</b>
<b>Authorised Signature:</b>	

**Exhibit A – Technical Report**

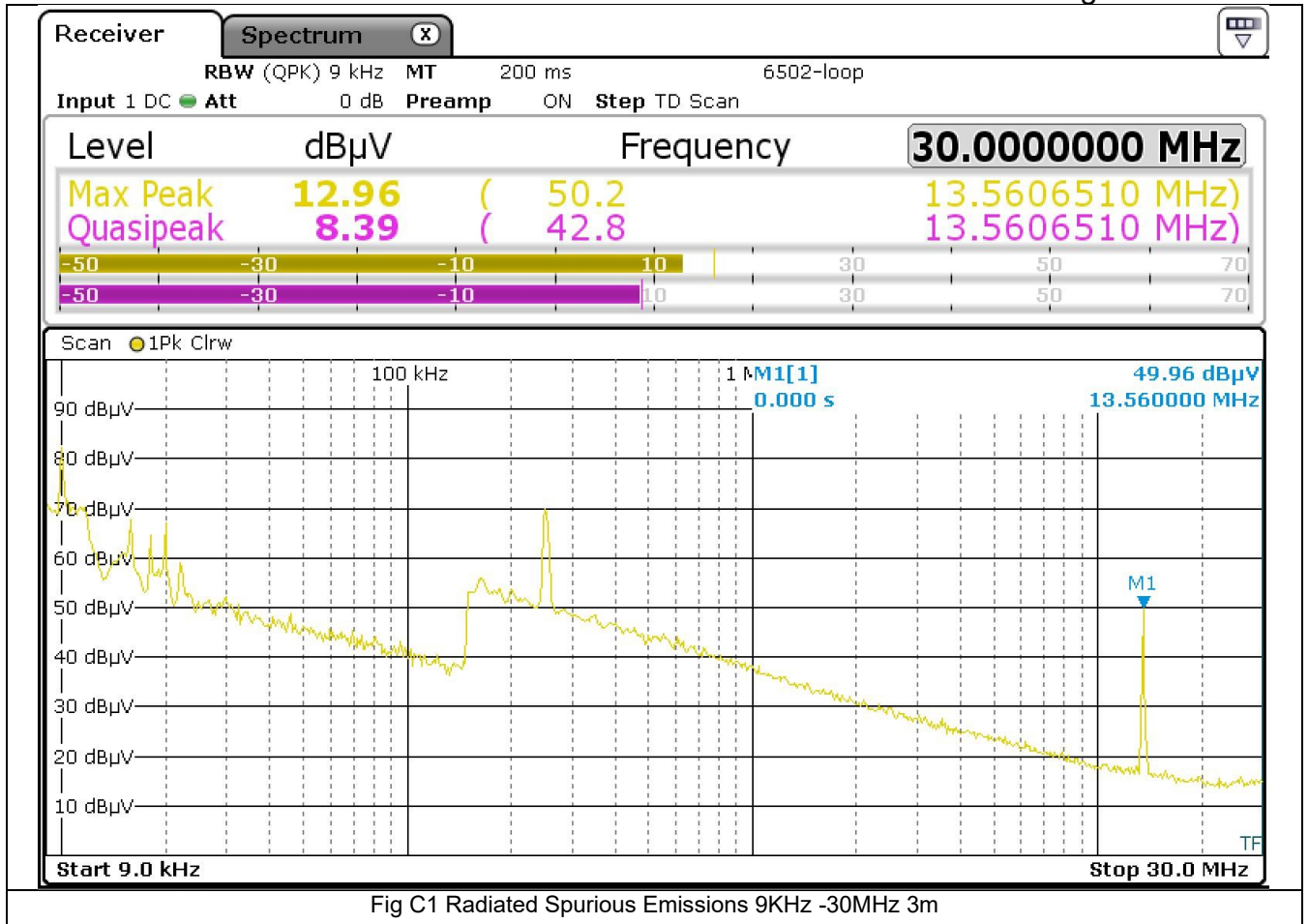
Appendix C Radiated Emissions Scans (All Radios except NFC) OFF	3
Appendix D Conducted Emissions on the Mains Scans	11
Appendix E List of Test Equipment	13
Appendix F Test Configurations	14

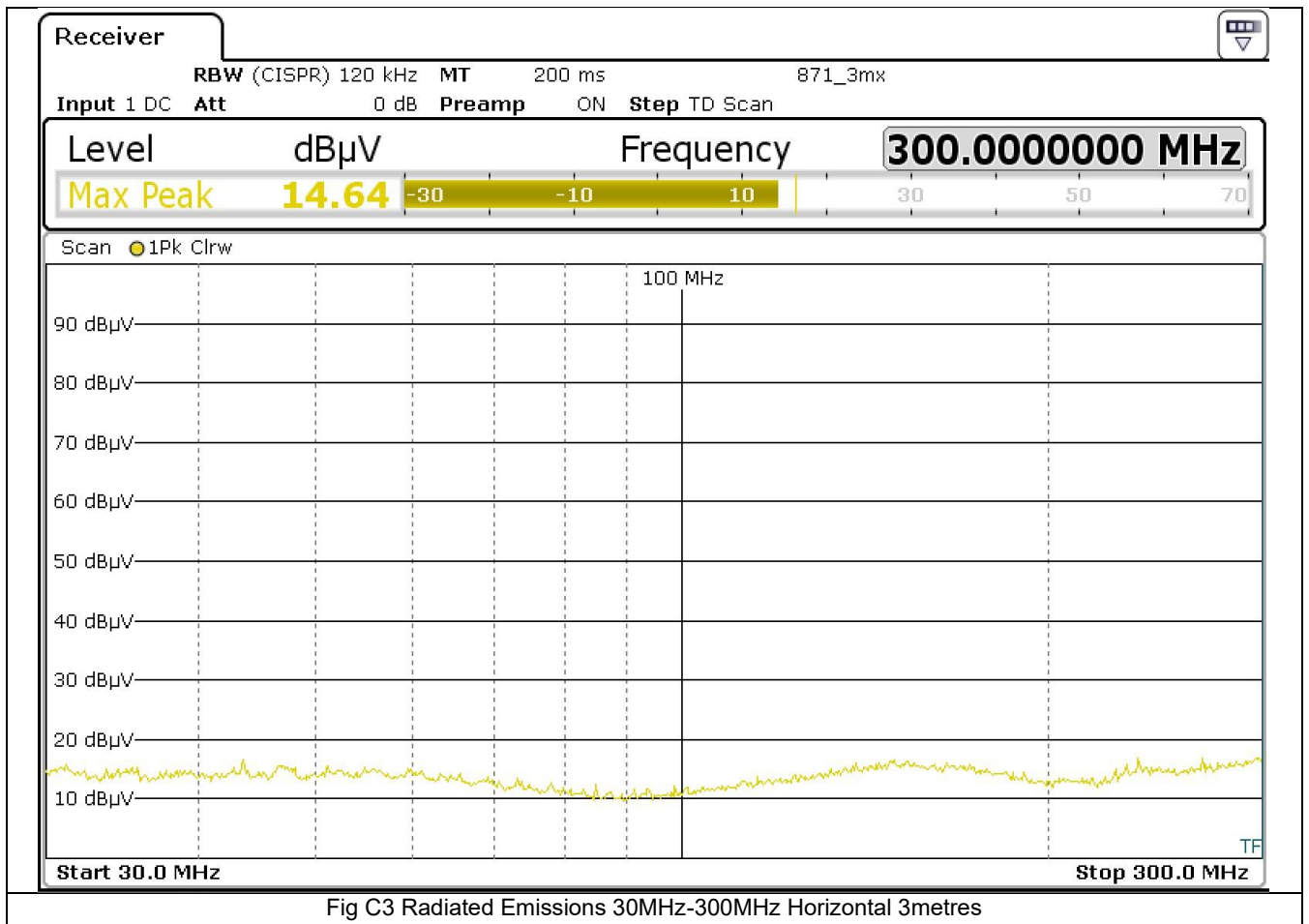
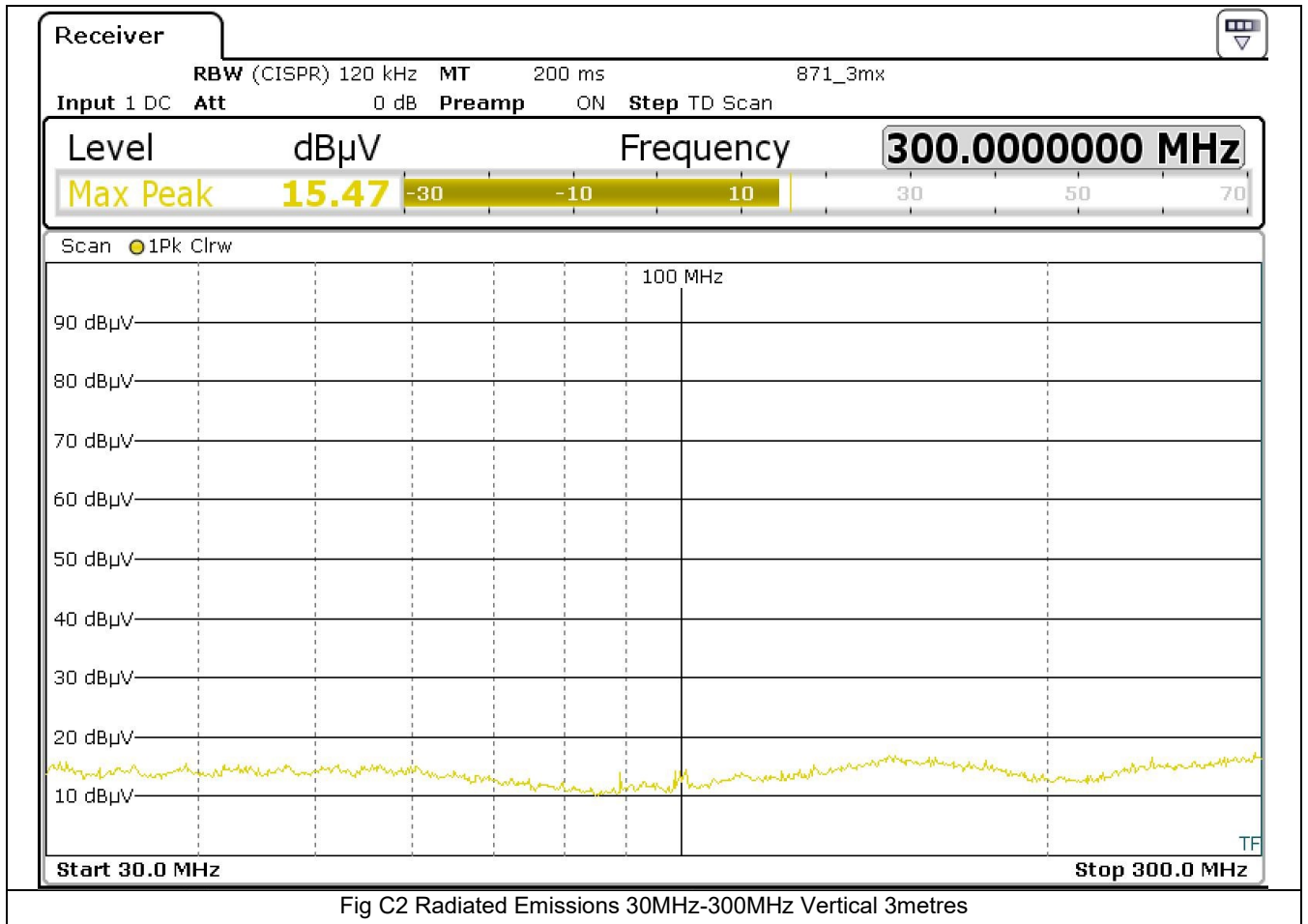
Ref 20E8588-2a Part 1 of 2 for main part of the report

**Appendix C:**

**Scan Results**

**All Radios off (except NFC)**





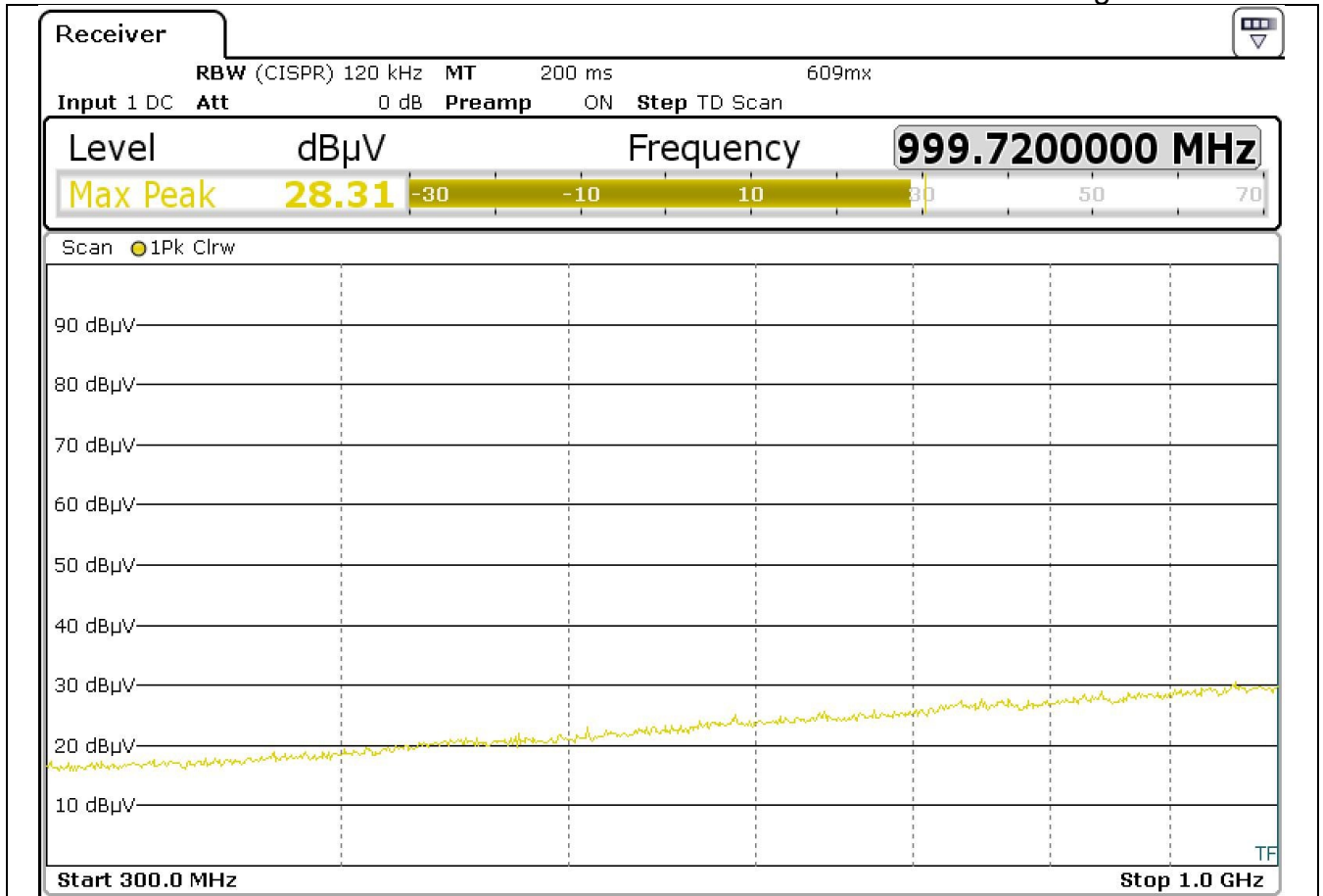


Fig C4 Radiated Emissions 300MHz-1GHz Vertical 3metres

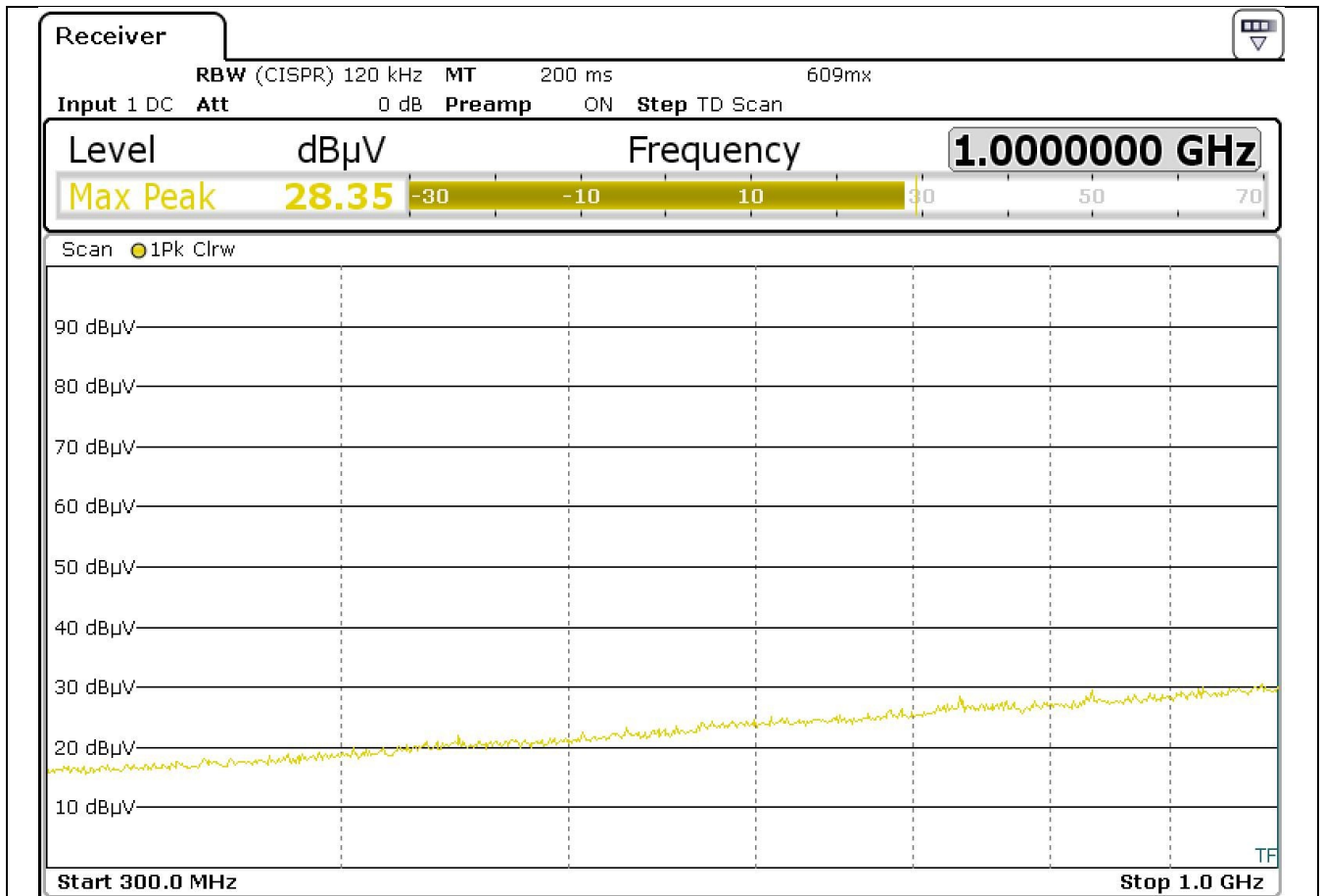


Fig C5 Radiated Emissions 300MHz-1GHz Horizontal 3metres

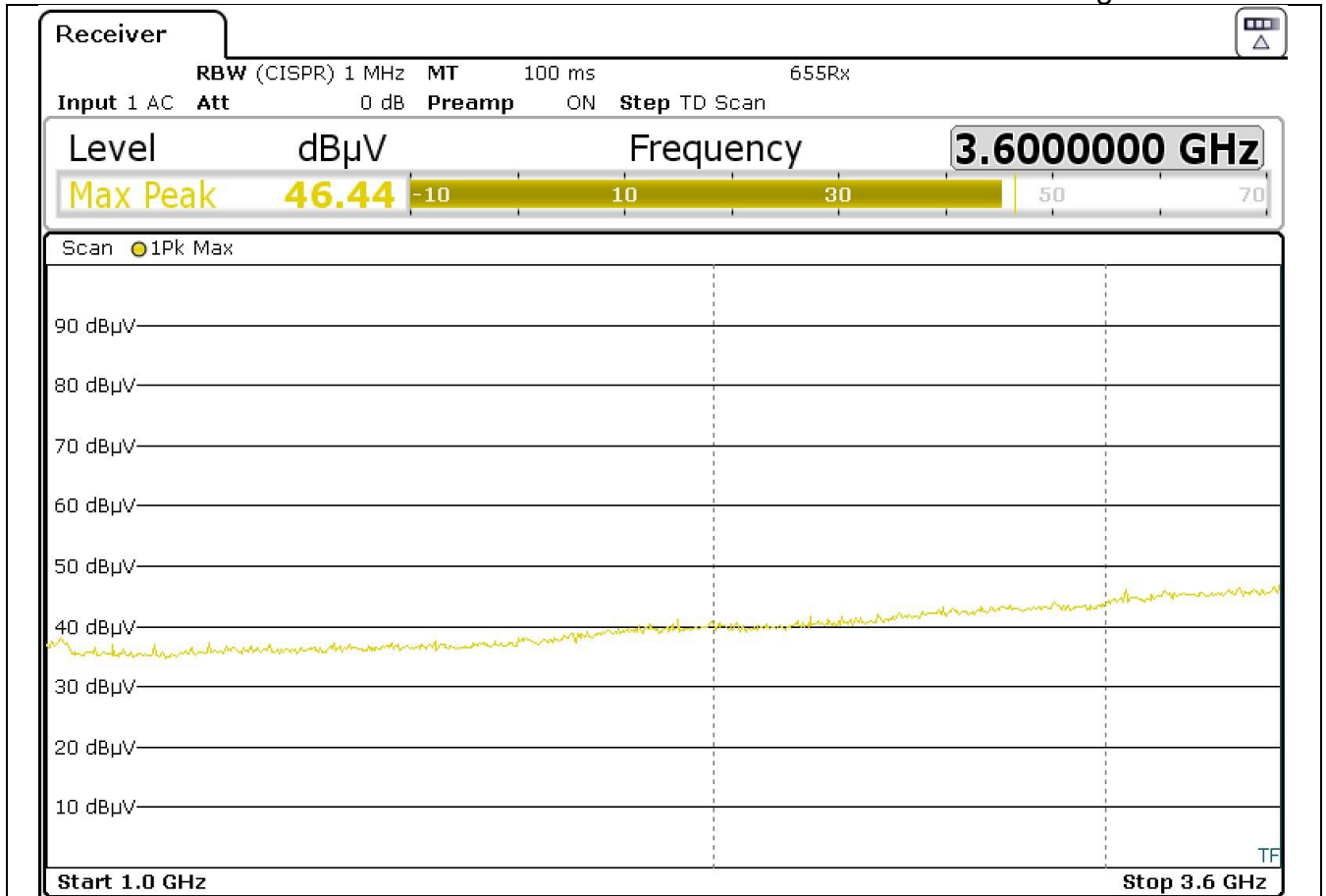


Fig C6 Radiated Emissions 1GHz-3.6GHz Vertical 3metres

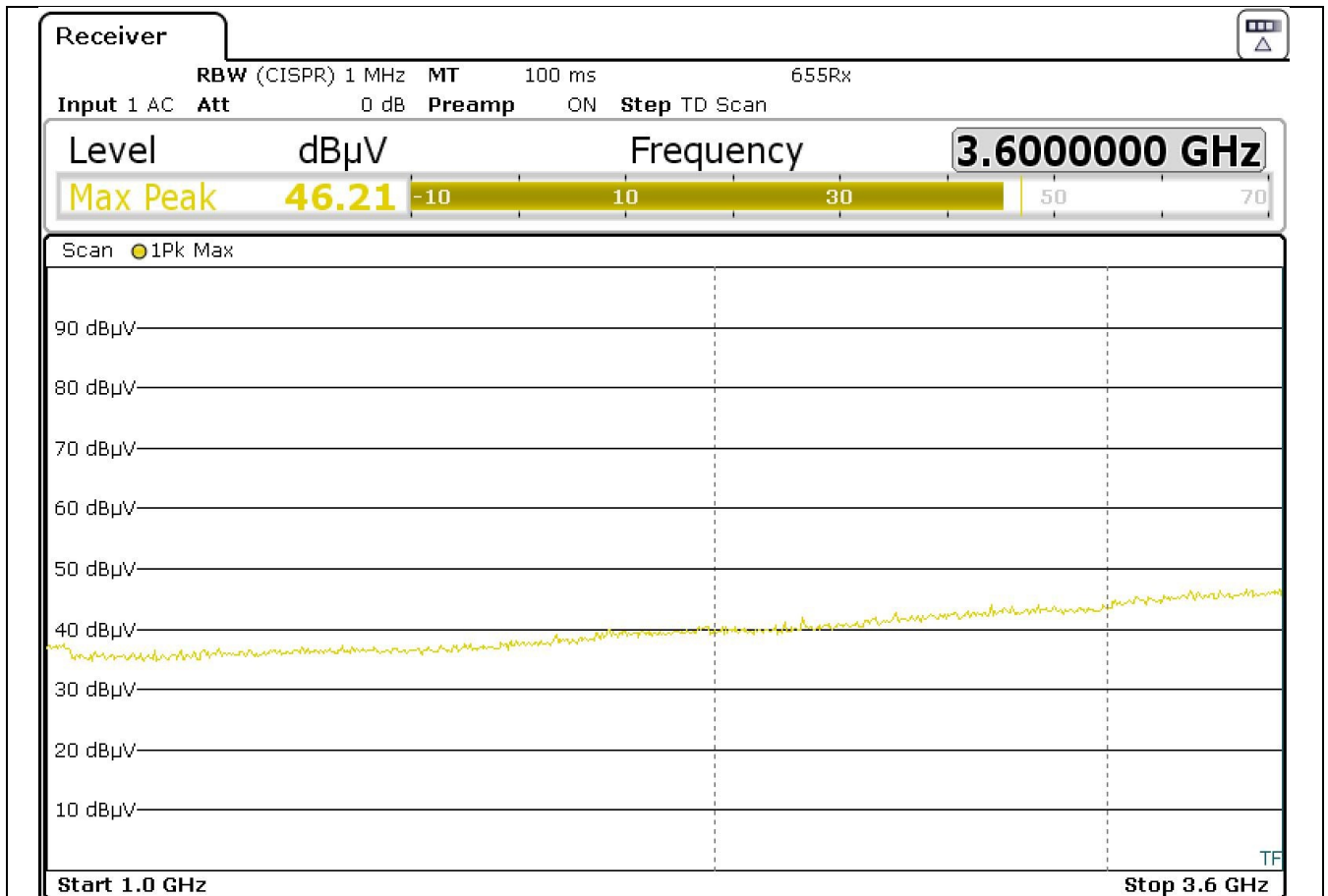


Fig C7 Radiated Emissions 1GHz-3.6GHz Horizontal 3metres

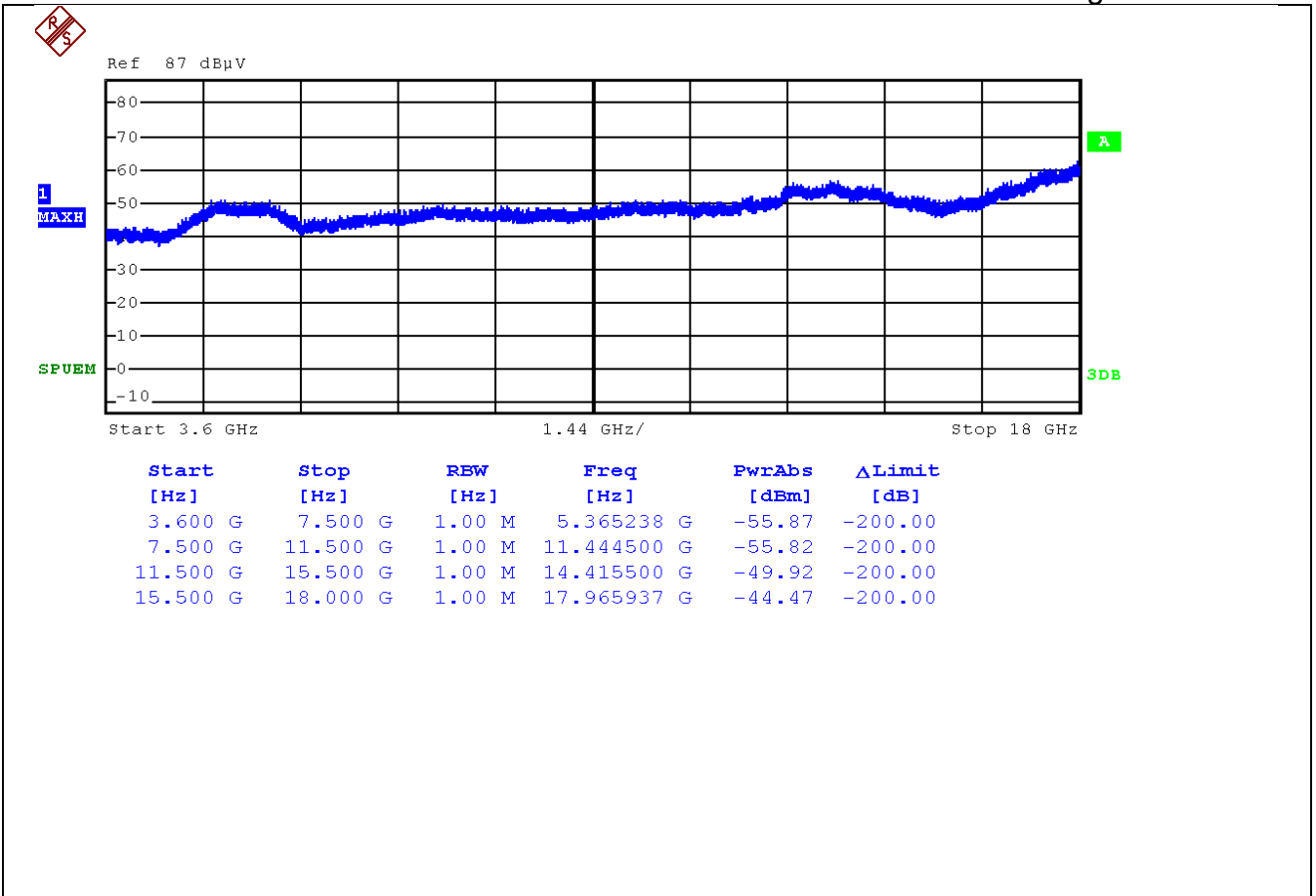


Fig C8 Radiated Emissions 3.6GHz-18GHz Vertical 3metres

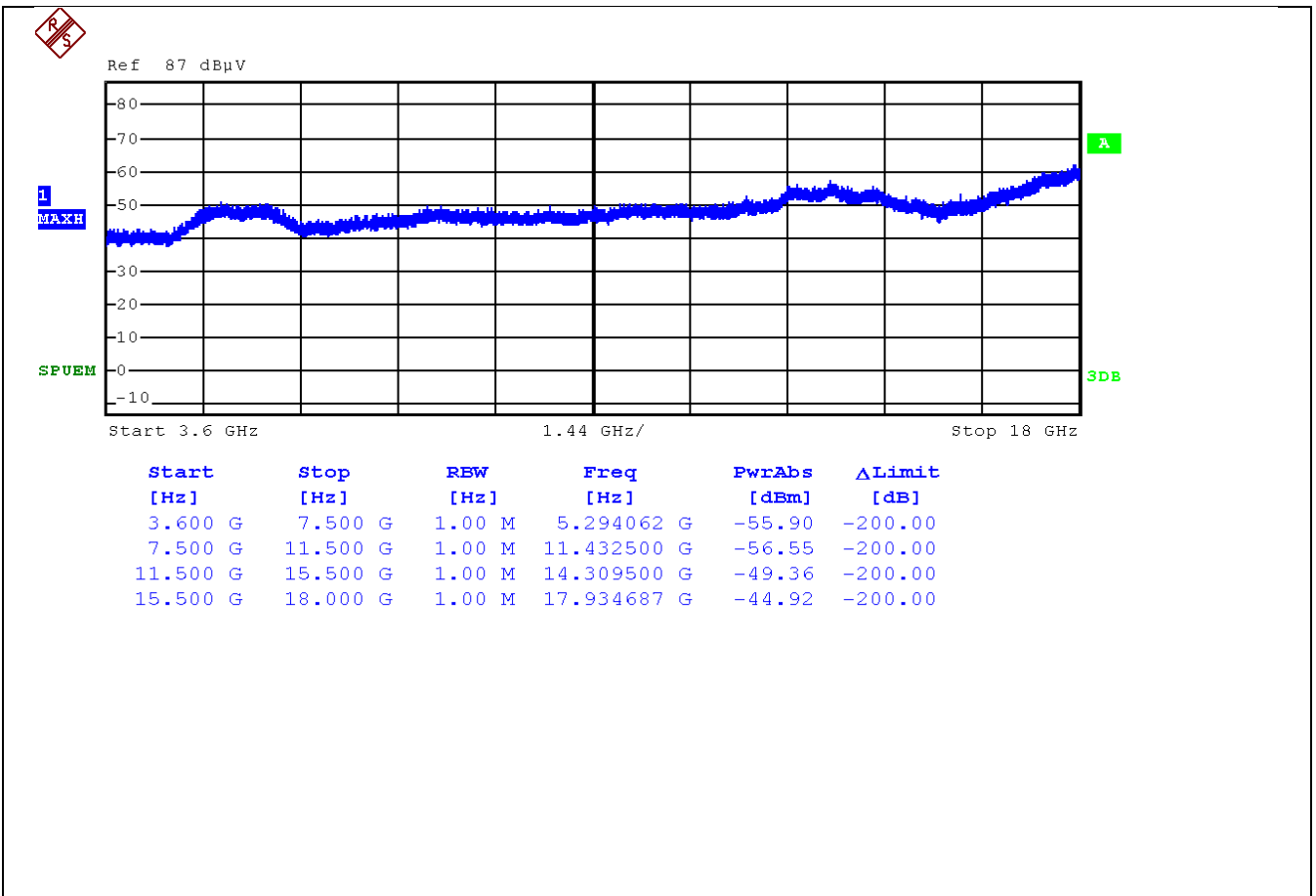


Fig C9 Radiated Emissions 3.6GHz-18GHz Horizontal 3metres



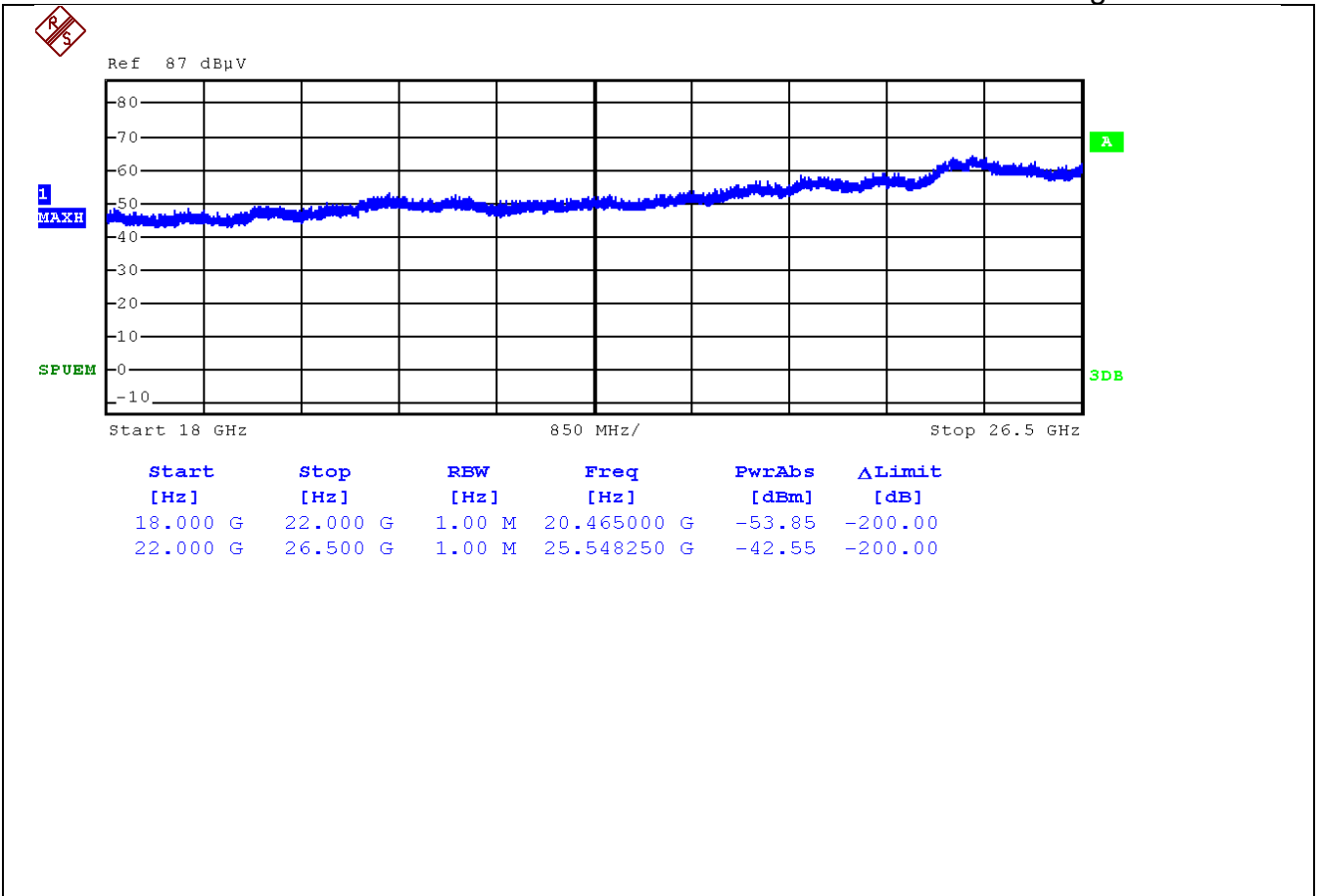


Fig C10 Radiated Emissions 18GHz-26.5GHz Vertical 3metres

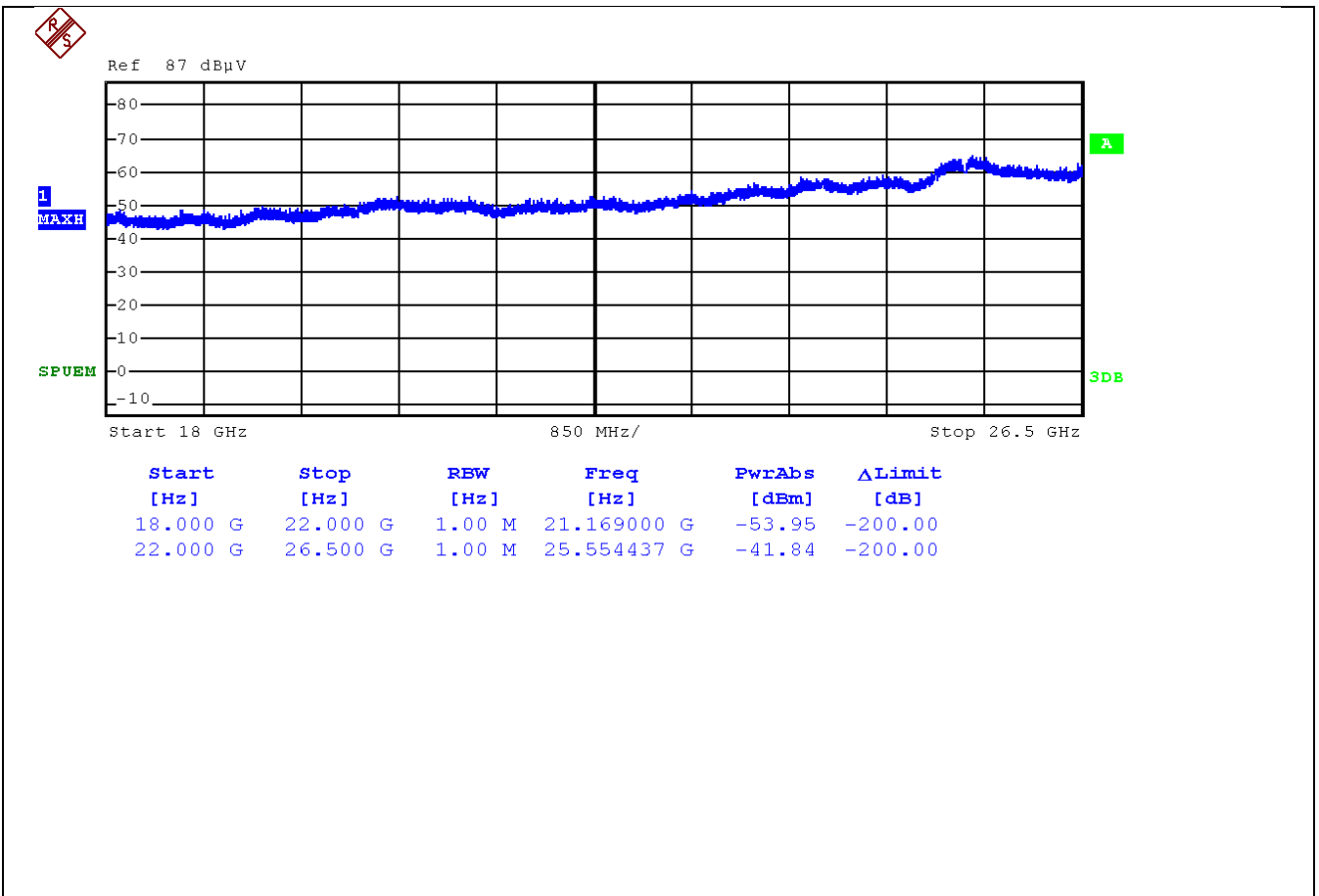


Fig C11 Radiated Emissions 18GHz-26.5GHz Horizontal 3metres



Fig C12 Radiated Emissions 26.5GHz-40GHz Vertical 0.3metres

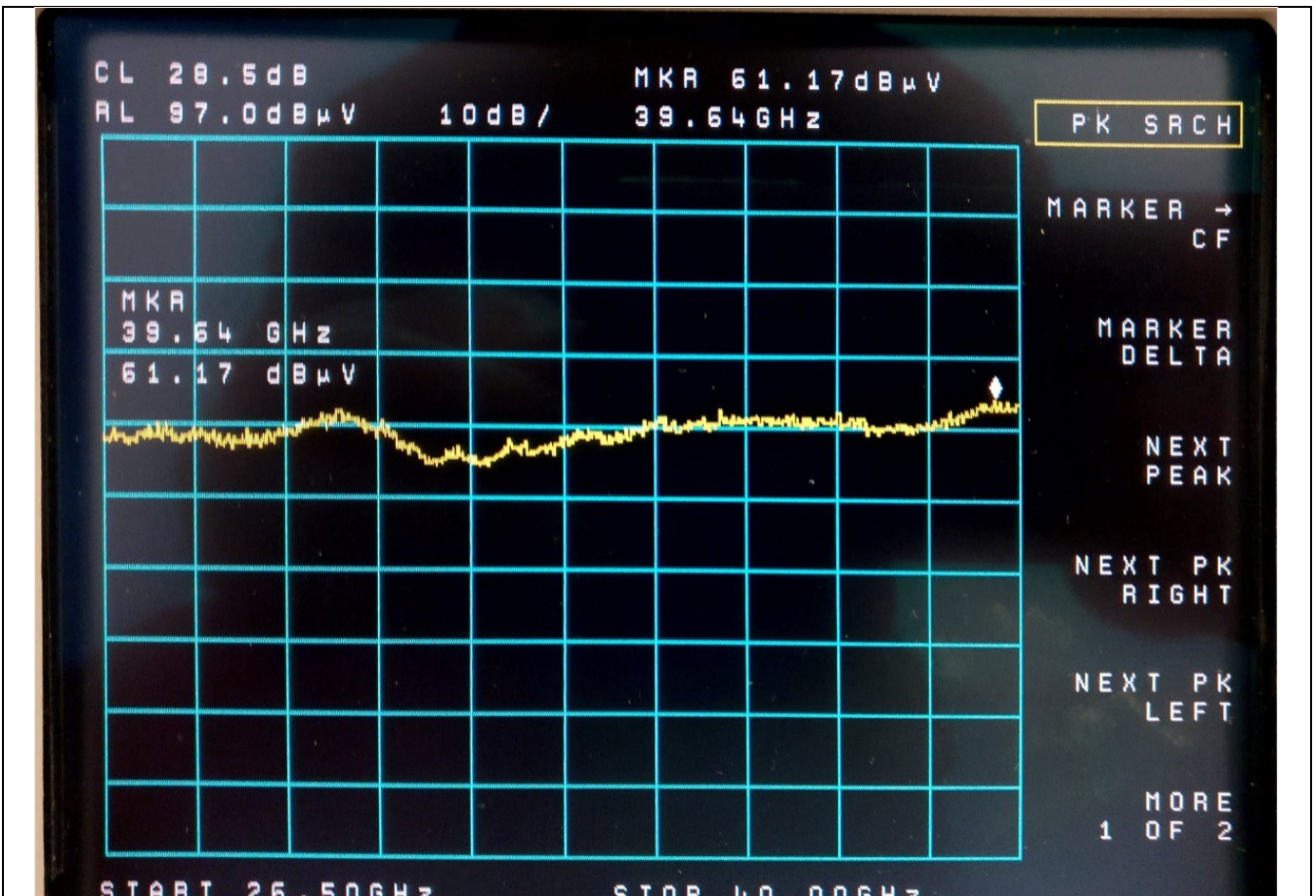


Fig C13 Radiated Emissions 26.5GHz-40GHz Horizontal 0.3metres

## **Appendix D**

### **Conducted Emissions on the mains**

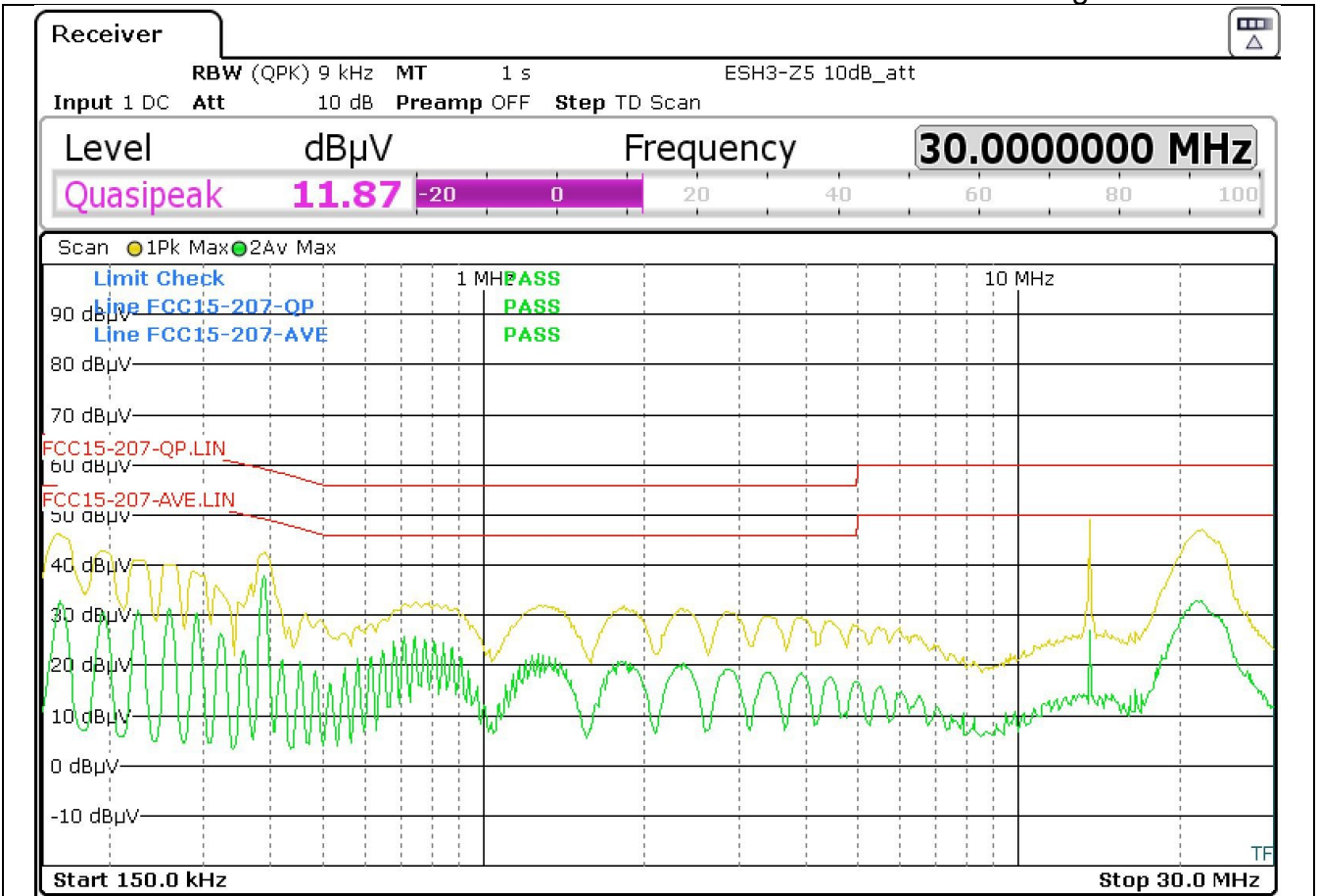


Fig D1 Conducted Emissions on the mains live

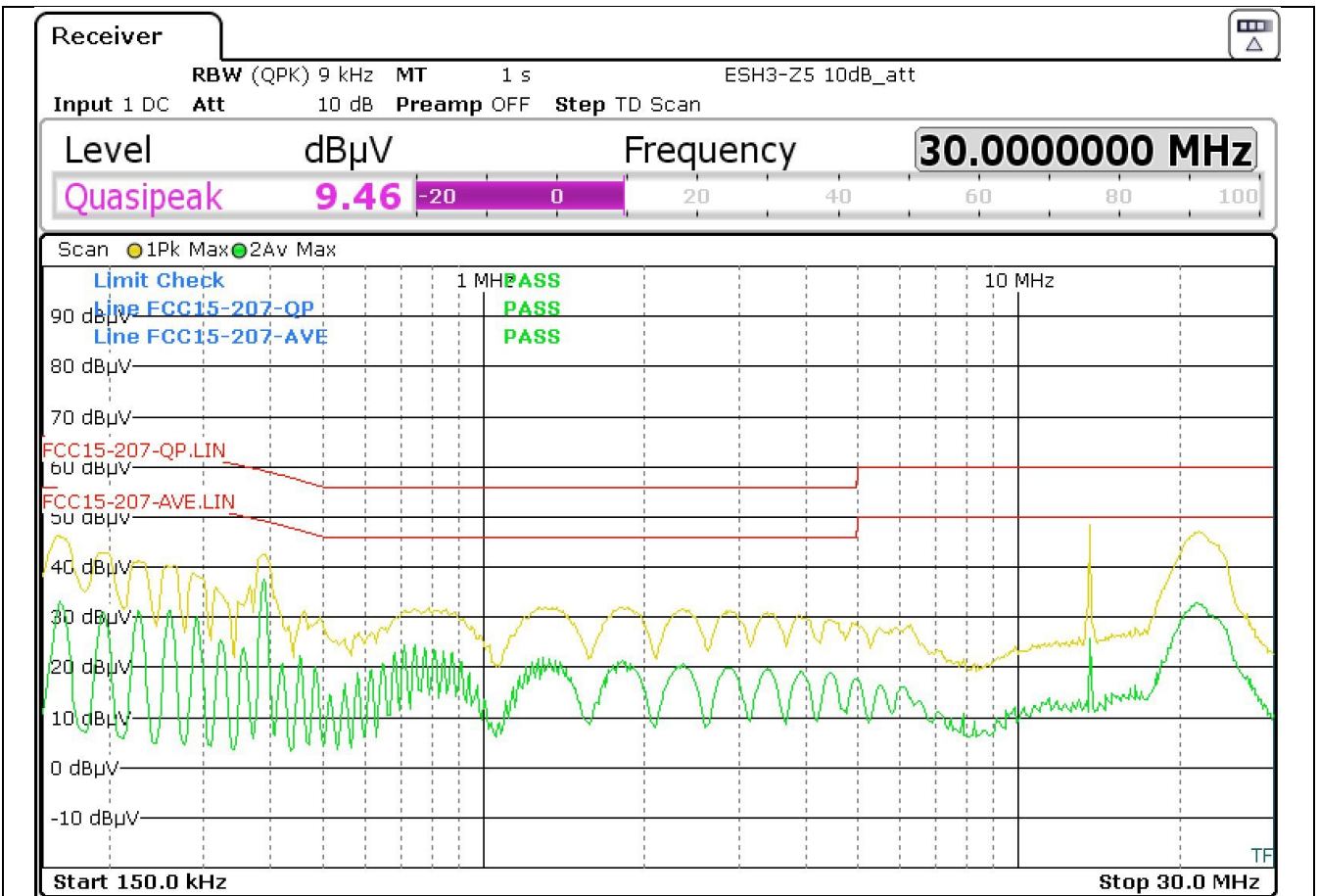


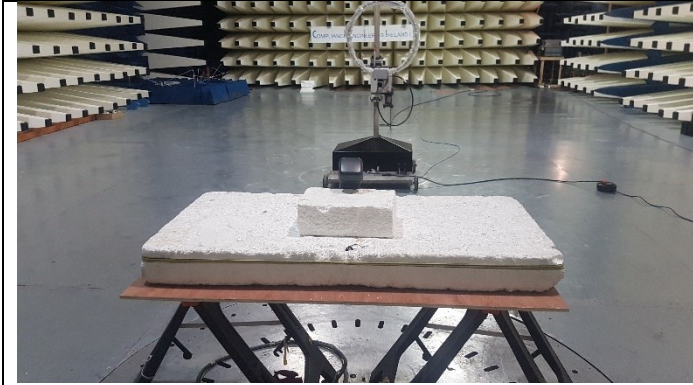
Fig D2 Conducted Emissions on the mains neutral

**Appendix E**

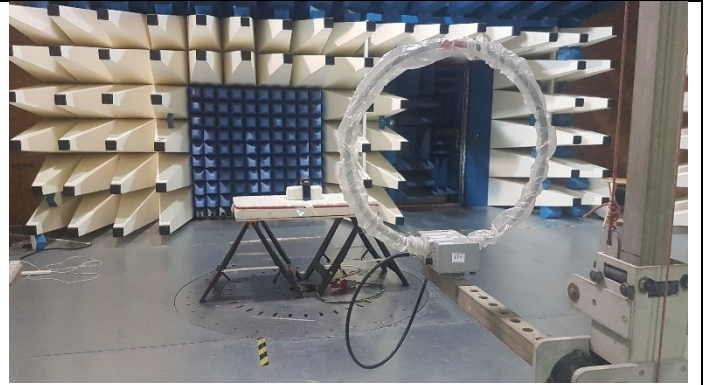
**List of Test Equipment**

<b>Instrument</b>	<b>Manufacturer</b>	<b>Model</b>	<b>Serial Num</b>	<b>CEI Ref</b>	<b>Cal Due Date</b>	<b>Cal Interval Months</b>
Test Receiver 3.6GHz	Rohde& Schwarz	ESR	1316.3003k03-101625-s	869	07-Jun-20	36
Anechoic Chamber	CEI	SAR 10M	845	845	16-Mar-22	36
Antenna Log Periodic	Chase	UPA6108	1072	609	03-Sep-21	36
Loop Antenna	EMCO	6502	9609-3099	821	07-Nov-20	36
Antenna Biconical	Schwarzbeck	VHBB 9124	9124 667	871	03-Sep-21	36
LISN	Rohde& Schwarz	ESH3-Z5	825460/003	604	16-Feb-22	36
Microwave Preamplifier	Hewlett Packard	83017A	3123A00175	805	30-Sep-20	12
Spectrum Analyser 30Hz-40GHz	Rohde& Schwarz	FSP40	100053	850	11-Dec-21	36
Antenna Horn	AH Systems	SAS-200/571	373	839	14-Mar-21	36
Fully Anechoic Chamber	CEI	FAR 3M	906	906	22-Mar-21	36
Antenna Standard Gain Horn 26.5 - 40 GHz	A-info	LB-28-25-C-KF	J2022091103051	878	05-Oct-20	12
Antenna Horn Standard Gain 18-26.5GHz	A-info	LB-42-25-C-KF	J2021091103028	877	05-Oct-20	12

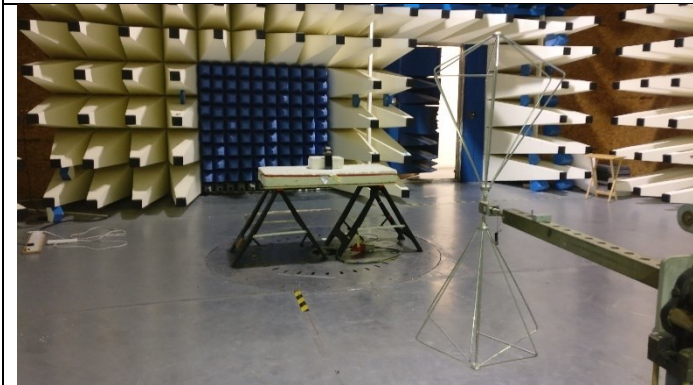
**Appendix F**  
**Test Configurations:**



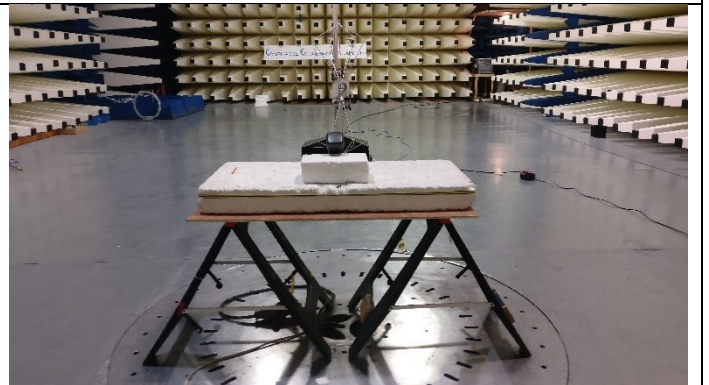
**Fig F1 Spurious Emissions 9KHz -30MHz 3 metres**



**Fig F2 Spurious Emissions 9KHz -30MHz 3 metres**



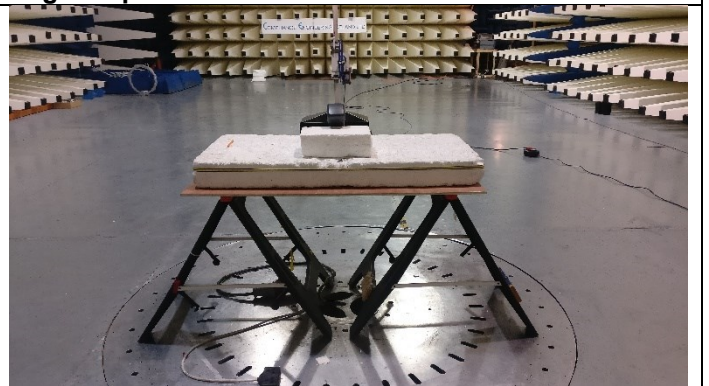
**Fig F3 Spurious Emissions 30MHz-300MHz 3 metres**



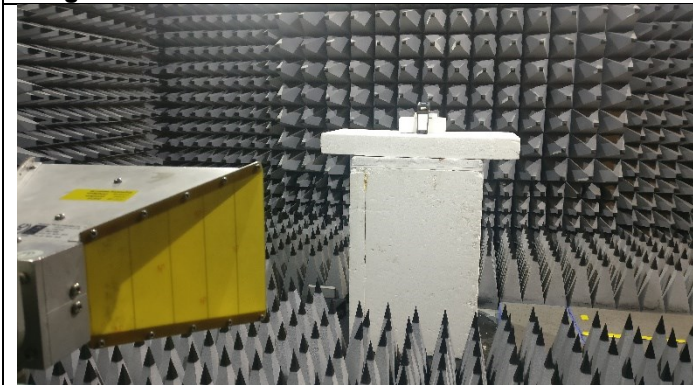
**Fig F4 Spurious Emissions 30MHz-300MHz 3 metres**



**Fig F5 Radiated Emissions 300MHz-1GHz 3metres**



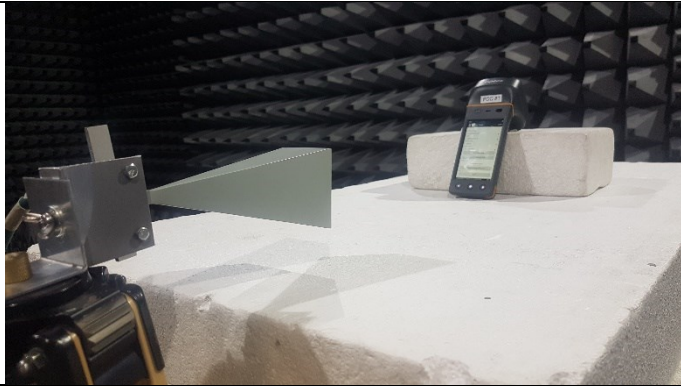
**Fig F6 Radiated Emissions 300MHz-1GHz 3metres**



**Fig F7 Radiated Emissions 1GHz-18GHz 3metres**



**Fig F8 Radiated Emissions 18GHz-26.5GHz 3metres**



**Fig F9 Radiated Emissions 26.5GHz-40GHz 0.3 metres**



**Fig F10 Conducted Emissions on the mains**



**Fig F11 Conducted Emissions on the mains**



Fig C5 EUT orientation "O1"



Fig C6 EUT orientation "O2"



Fig C7 EUT orientation "O3"

**Orientations for Radiated Emissions**

End of Report