



Compliance Engineering Ireland Ltd

Clonross Lane, Derrockstown, Dunshaughlin
Co. Meath, Ireland A85 XN59
Ph +353 1 8017000 , 8256722

Project Num	17E6742-1a
Quotation	Q17-0205-1b
Prepared For	Nordic ID Oy
Company Address	Myllyojakatu 2A FI-24100 Salo Finland
Prepared By	Compliance Engineering Ireland
Test Lab Address	Clonross Lane, Derrockstown, Dunshaughlin, Co. Meath, Ireland
Tested By	Michael Kirby
Test Report By	Michael Kirby
FCC Site Registration	92592
IC Site Registration	8517-A2, 8517-A1
Date	28 th Jun 2017
IC Equipment Authorisation	Test Report
EUT Description	RFID Module
FCC ID	SCCNUR21W
IC ID	5137A-NUR21W
Authorised by	John McAuley
Authorised Signature :	

TEST SUMMARY

The equipment complies with the requirements according to the following standards.

FCC Spec.	IC Spec.	Test Parameters	Status
15.247 b 2	RSS-247 5.4	Maximum Peak Conducted Output power	Pass
15.247 a 1 i	RSS-247 5.1	Carrier Freq Separation for hopping channels	Pass
15.247 a 1 i	RSS-247 5.1	Number of hopping Channels.	Pass
15.247 a 1 i	RSS-247 5.1	Average Time of Occupancy of Hopping Frequency	Pass
15.247 a 1 i	RSS-247 5.1	20 dB Bandwidth	Pass
	RSS-Gen 6.6	99% bandwidth.	Pass
15.247d	RSS-247 5.5	100KHz RBW at band edges and Conducted Spurious emissions.	Pass
15.247d 15.209a	RSS-247 5.5	Radiated Emissions within restricted bands	Pass
15.209	RSS-Gen 6.13	Unintentional Radiated Emissions	Pass
15.207a	RSS-Gen 8.8	Conducted Emissions on the mains	Pass

RSS 247-1

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF COMPLIANCE ENGINEERING IRELAND LTD

Exhibit A – Technical Report

See Main report 17E6742-1a

Table of Contents

1.0	EUT DESCRIPTION	ERROR! BOOKMARK NOT DEFINED.
1.1	EUT OPERATION	5
1.2	MODIFICATIONS	ERROR! BOOKMARK NOT DEFINED.
1.3	DATE OF TEST	ERROR! BOOKMARK NOT DEFINED.
1.4	DESCRIPTION OF TEST MODES	5
2.0	EMISSIONS MEASUREMENTS	ERROR! BOOKMARK NOT DEFINED.
3.0	CONDUCTED EMISSIONS ON THE MAINS MEASUREMENTS	7
4.0	CONDUCTED MEASUREMENTS	8
5.0	RADIATED MEASUREMENTS	15
6.0	LIST OF TEST EQUIPMENT	18
7.0	MEASUREMENT UNCERTAINTY	19
	APPENDIX A SCANS FOR CONDUCTED MEASUREMENTS	20
	APPENDIX B SCANS FOR CONDUCTED BAND EDGE	27
	APPENDIX C SCANS FOR RADIATED SPURIOUS EMISSIONS ANTENNA PORT TERMINATED	30
	APPENDIX D SCANS FOR RADIATED SPURIOUS EMISSIONS RESTRICTED BANDS ANTENNA #1	35
	APPENDIX E SCANS FOR RADIATED SPURIOUS EMISSIONS RESTRICTED BANDS ANTENNA #2	42

*Note appendix F ,G,H are in this report

	APPENDIX F SCANS FOR RADIATED BAND EDGE ANTENNA #1	49
	APPENDIX G SCANS FOR RADIATED BAND EDGE ANTENNA #2	52
	APPENDIX H SCANS FOR CONDUCTED EMISSIONS ON THE MAINS	55

Appendix F

**Radiated Emissions
Band Edge with antenna #1**

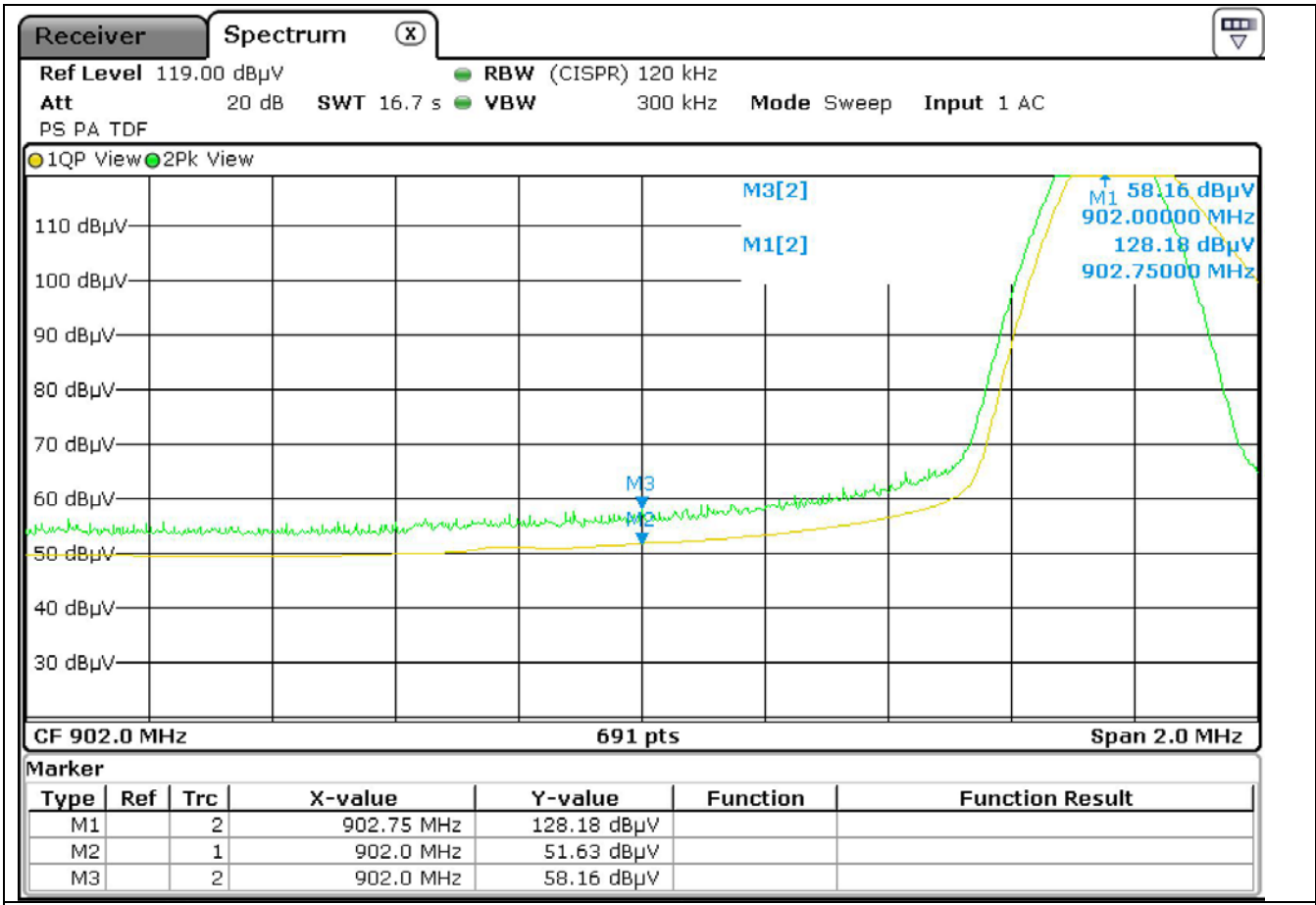


Fig F1 Lower Band Edge Radiated Vertical 3metres

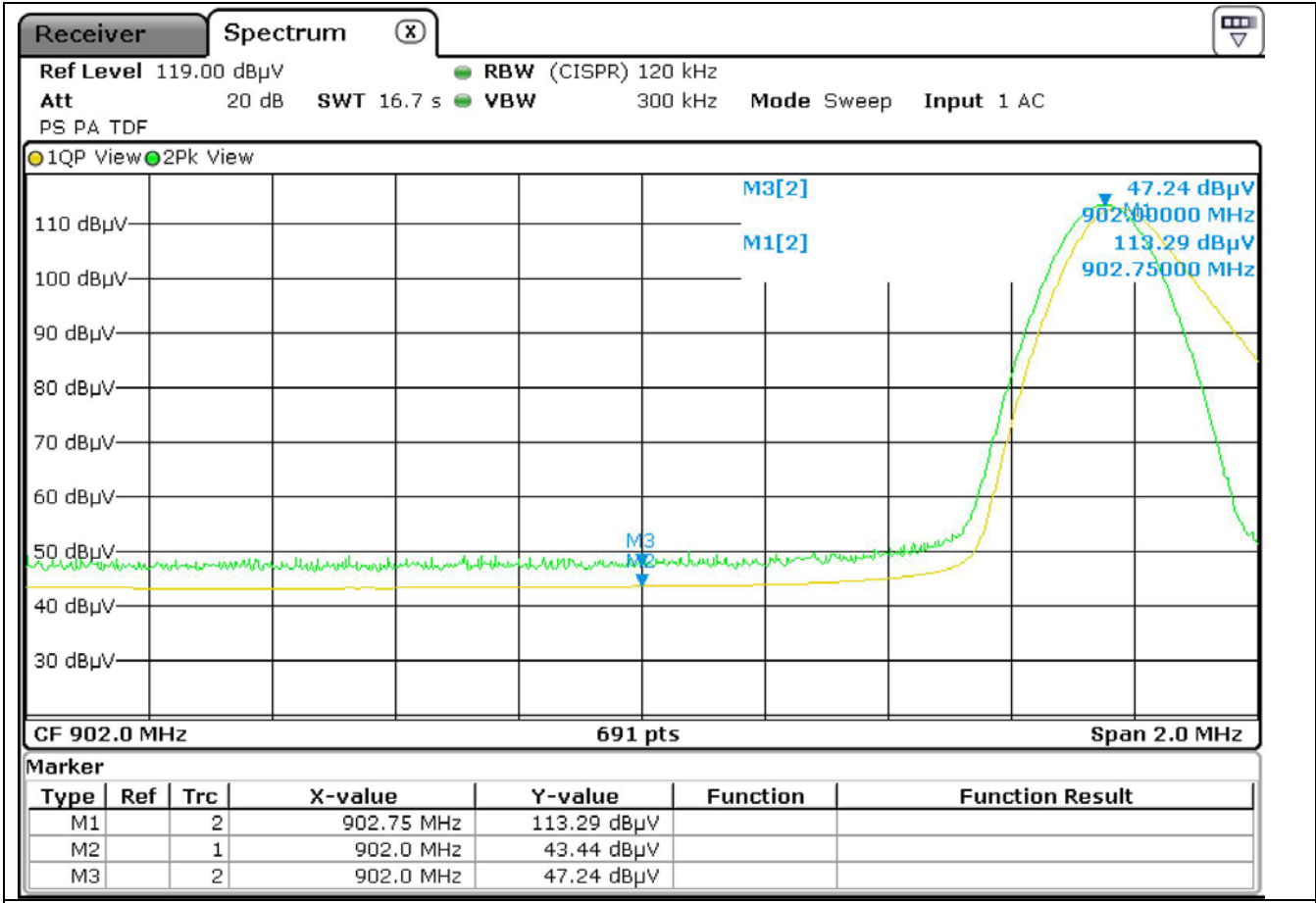


Fig F2 Lower Band Edge Radiated Horizontal 3metres

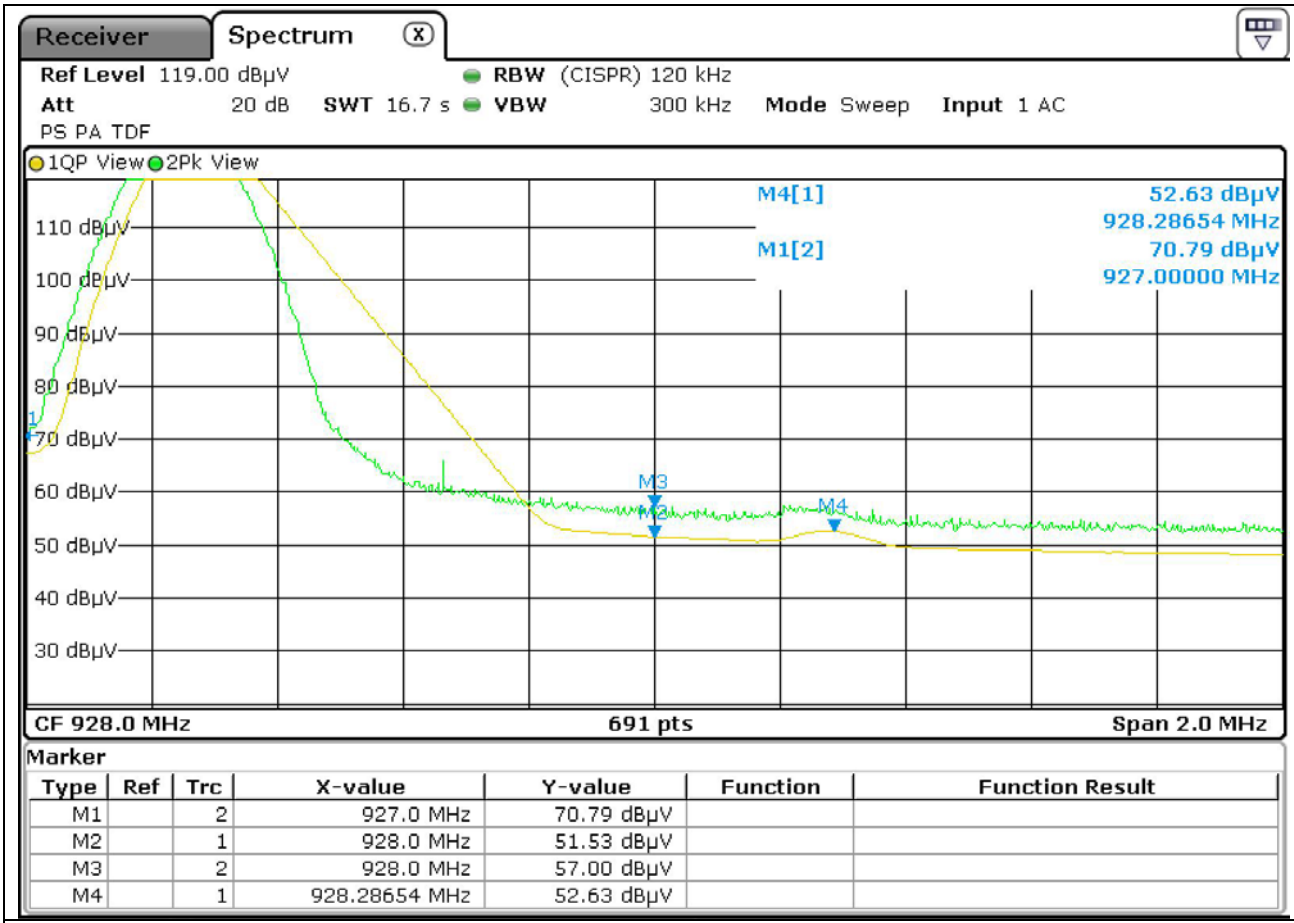


Fig Upper Band Edge Radiated Vertical 3metres

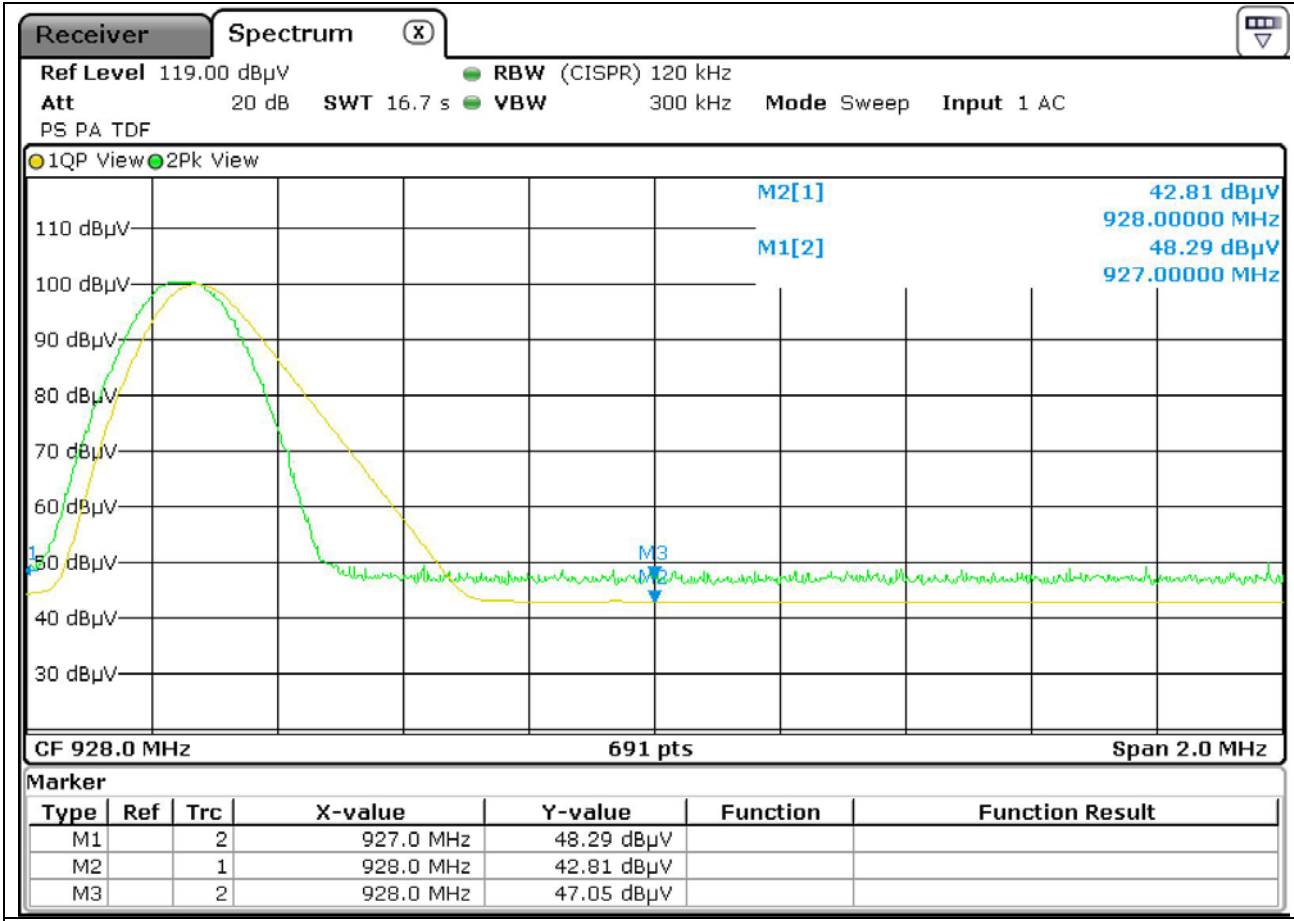


Fig F4 Upper Band Edge Radiated Horizontal 3metres

Appendix G

**Radiated Emissions
Band Edge with antenna #2**

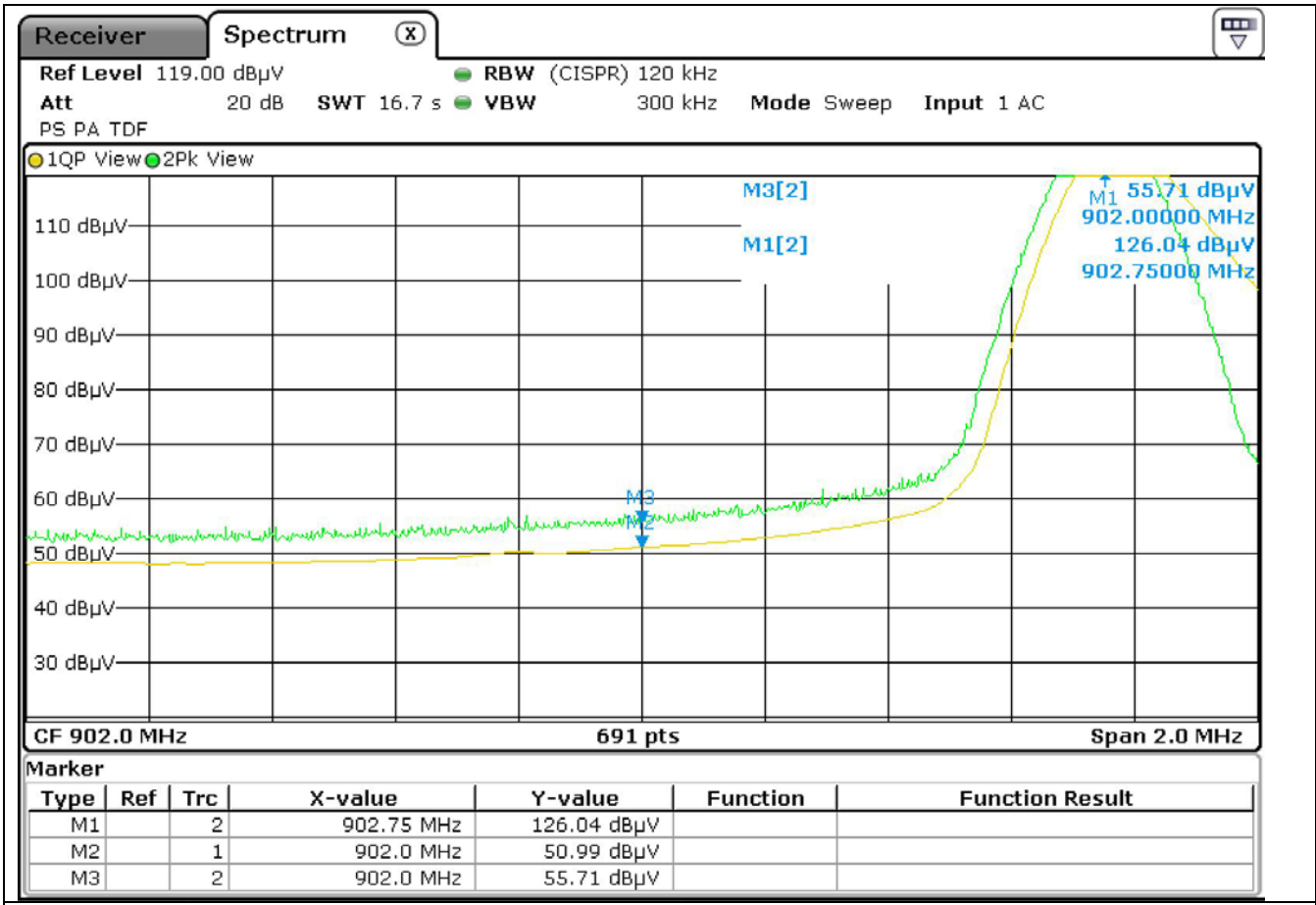


Fig G1 Lower Band Edge Radiated Vertical 3metres

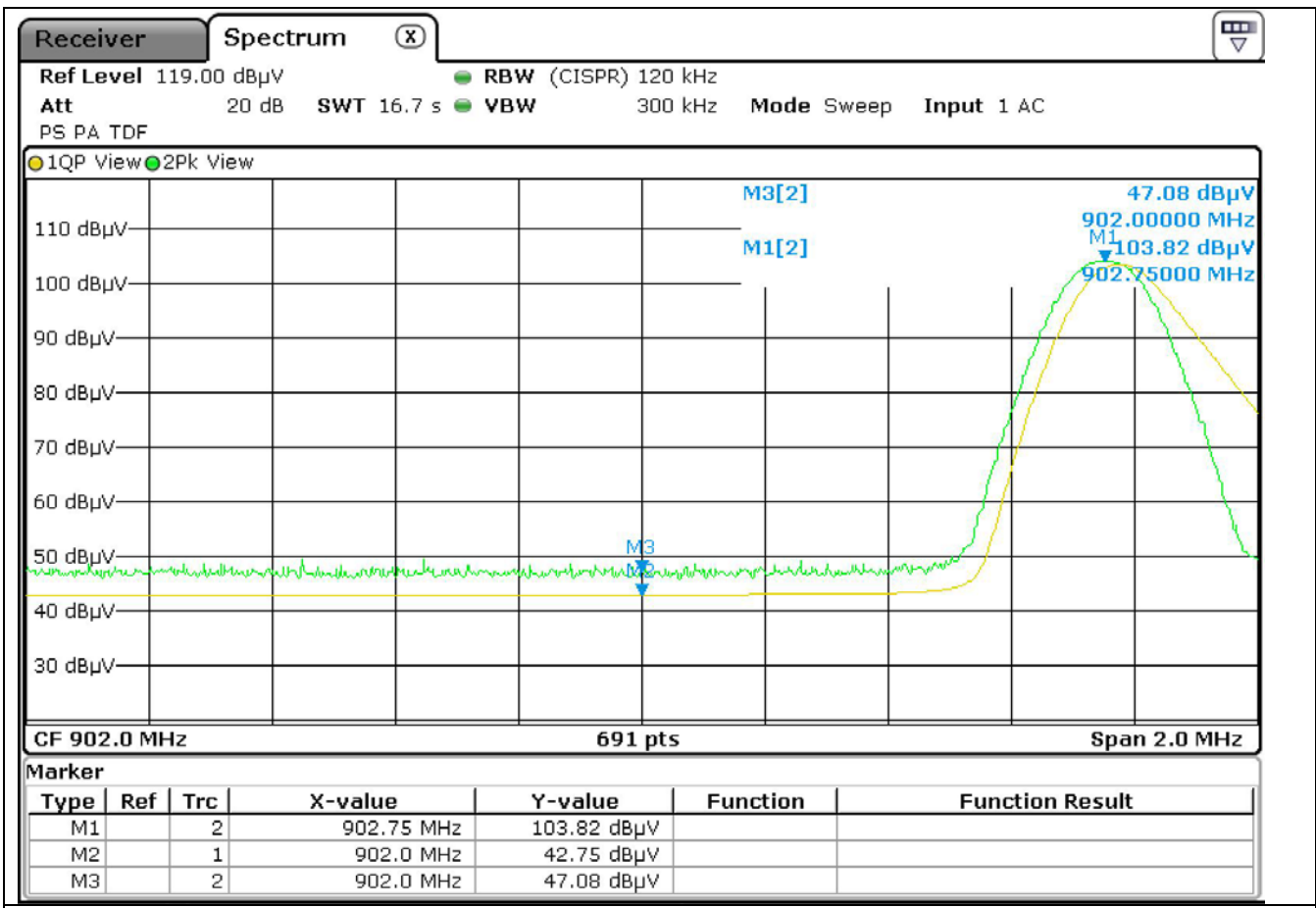


Fig G2 Lower Band Edge Radiated Horizontal 3metres

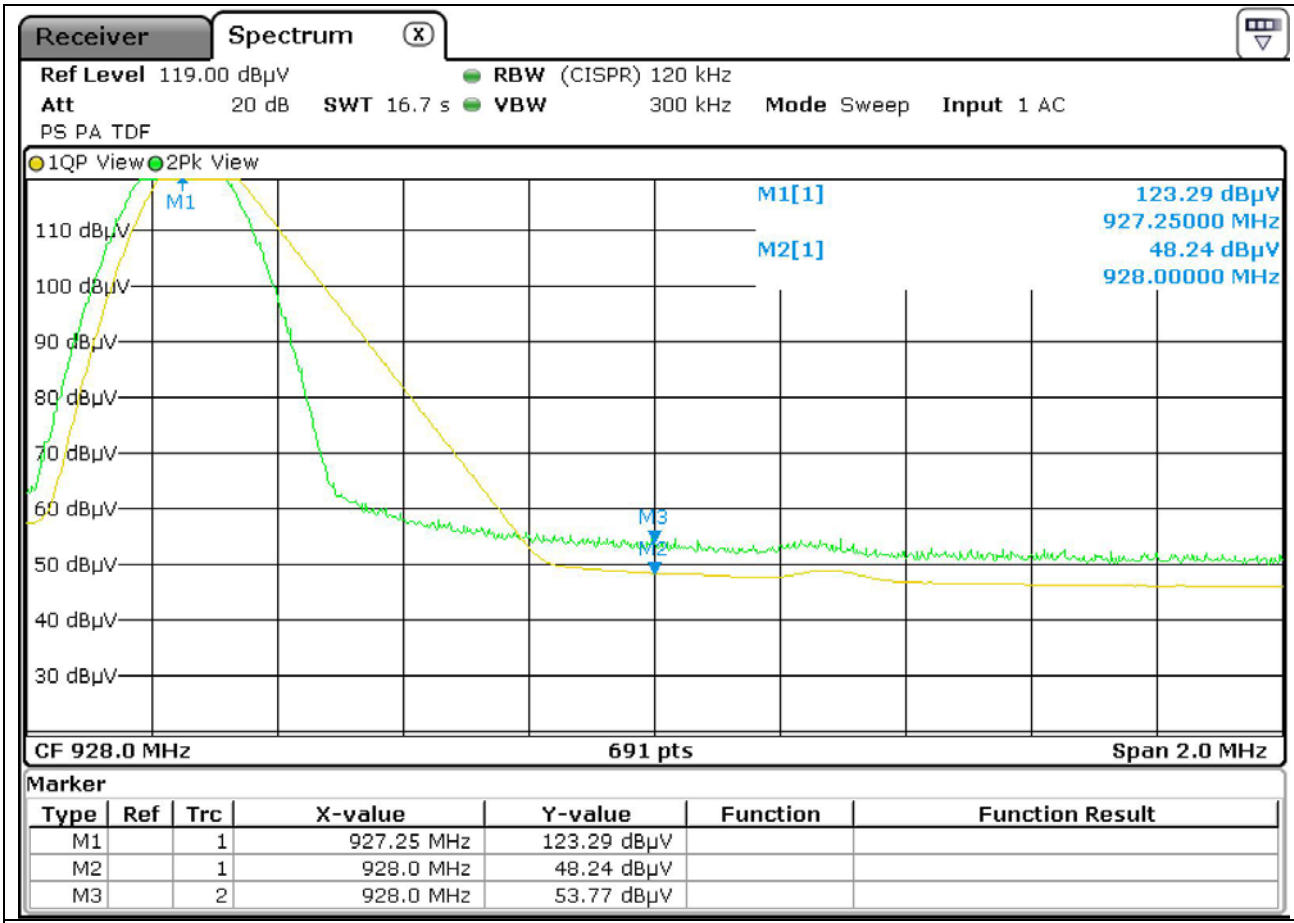


Fig G3 Upper Band Edge Radiated Vertical 3metres

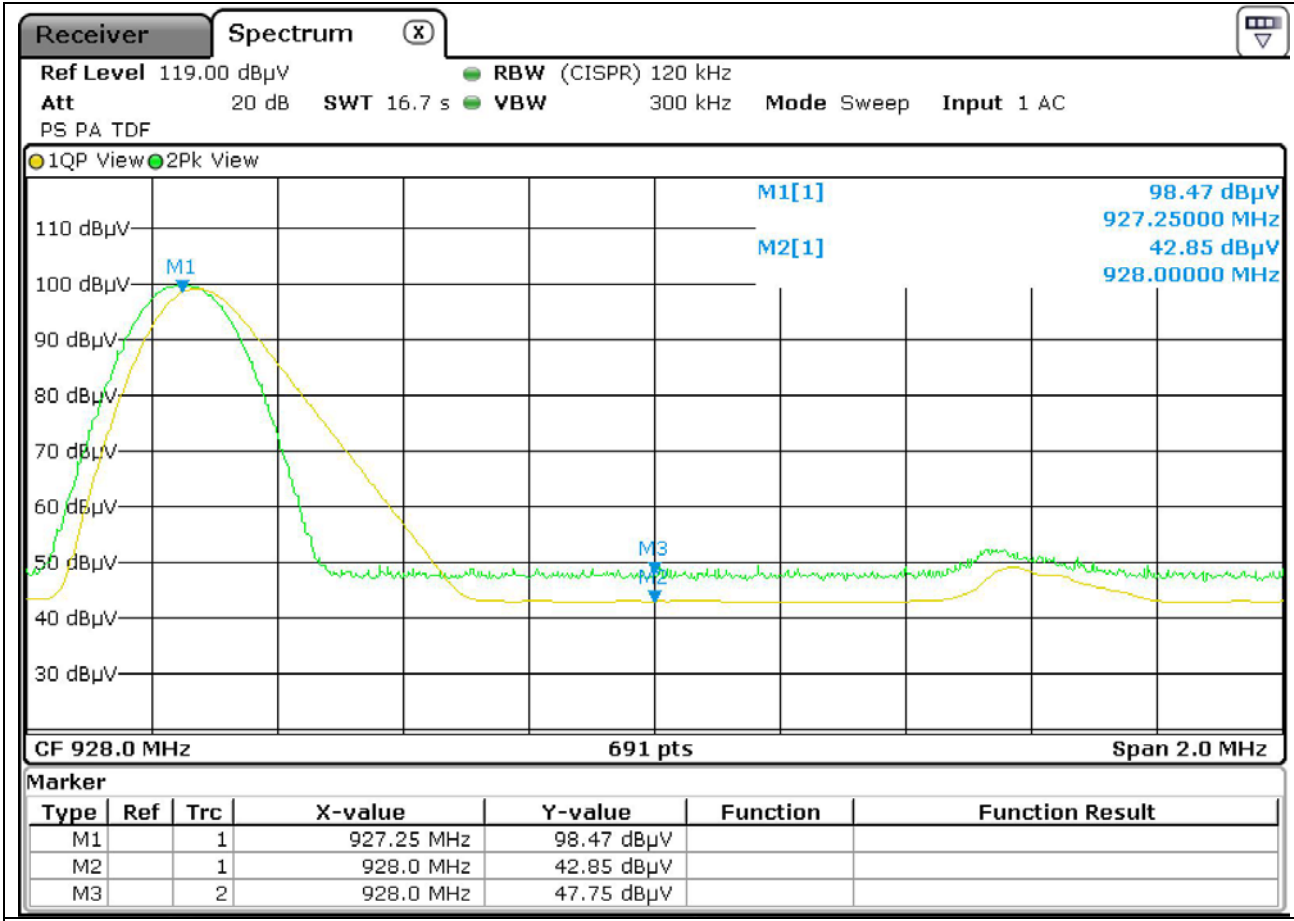


Fig G4 Upper Band Edge Radiated Horizontal 3metres

Appendix H

Conducted Emissions on the mains

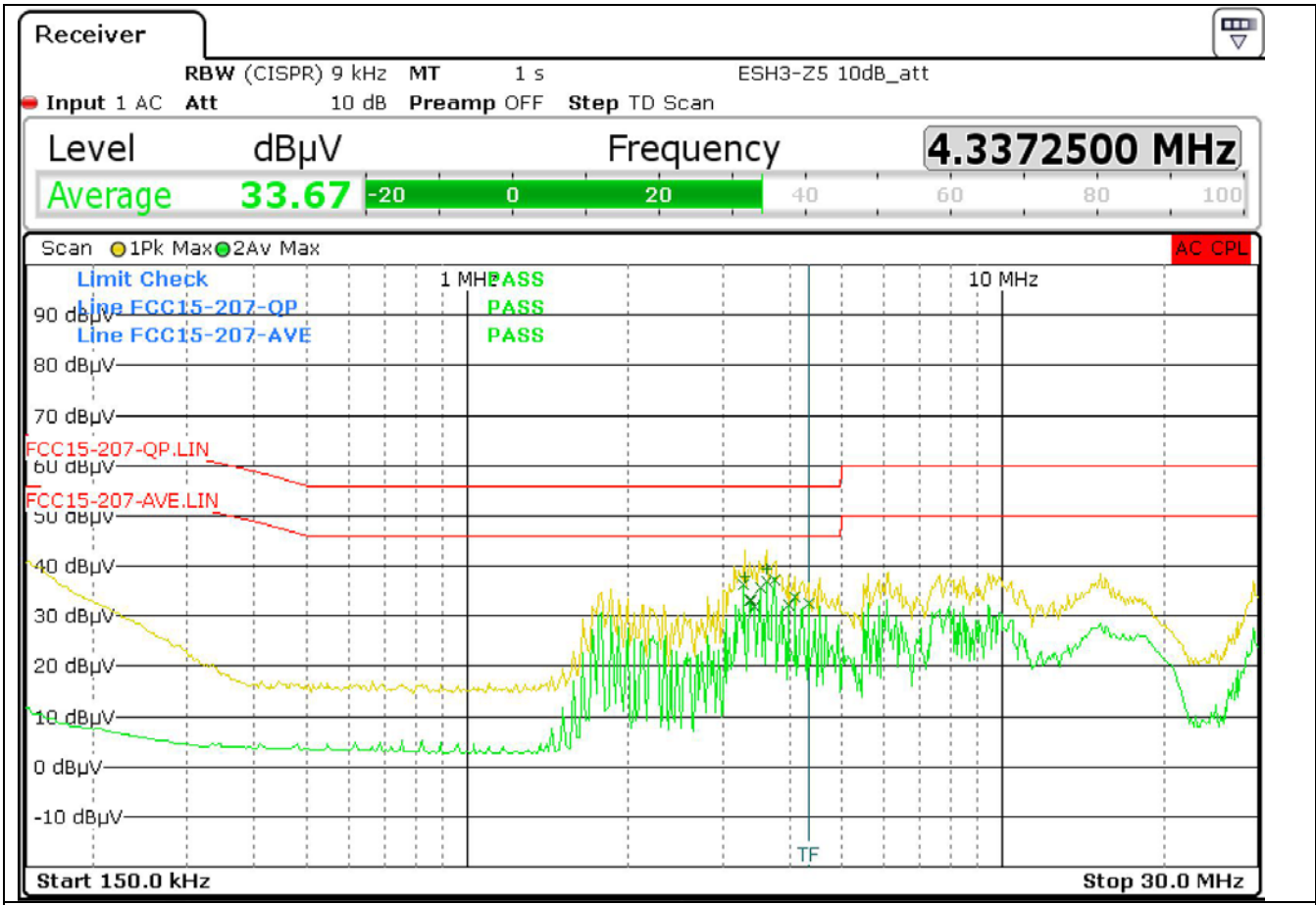


Fig H1 Conducted Emissions on the mains Live

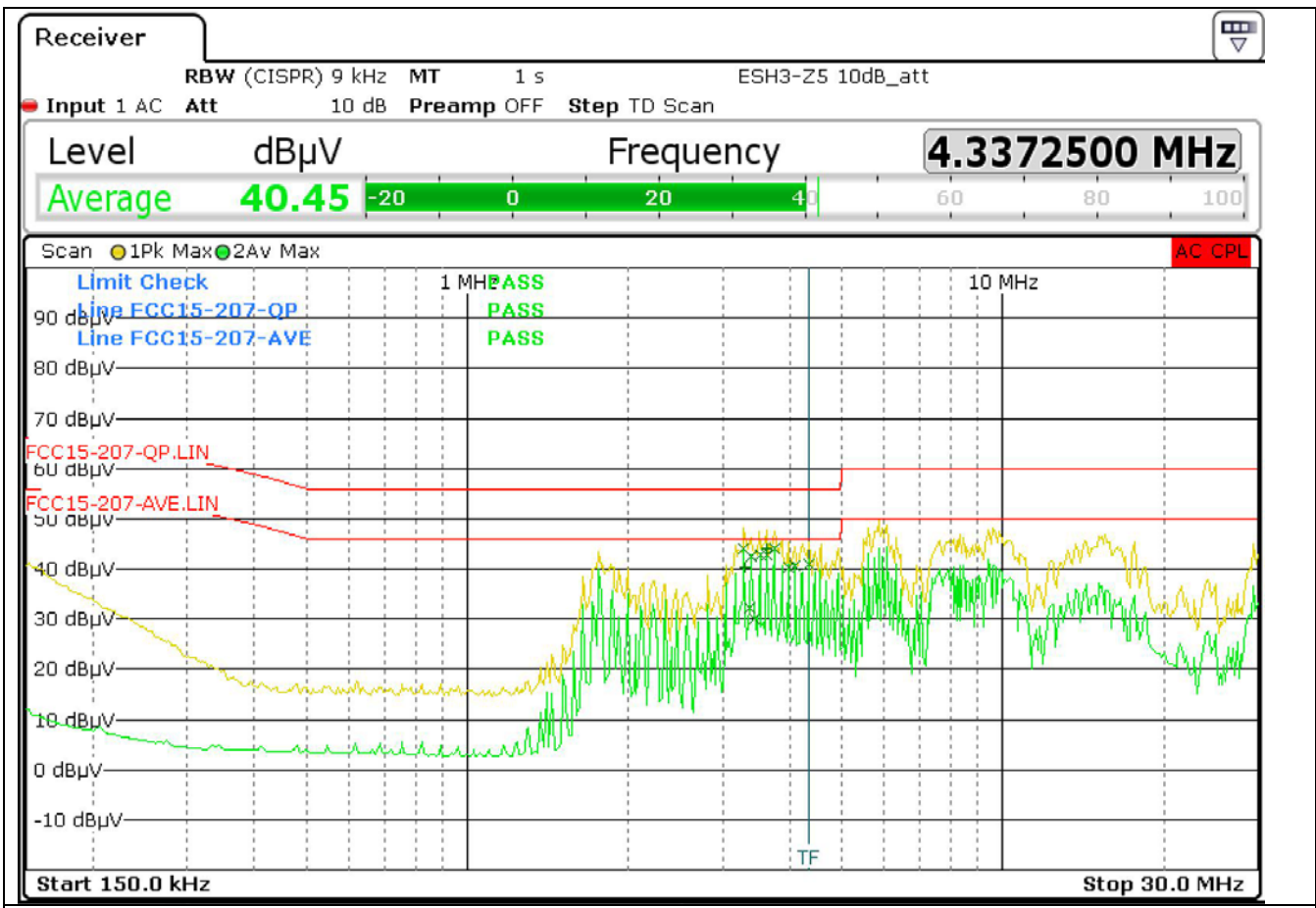


Fig H2 Conducted Emissions on the mains Neutral

End of Report