



849 NW State Road 45
Newberry, FL 32669 USA
Phone: 352.472.5500
Email: info@timcoengr.com
Website: www.timcoengr.com

FCC PART 15B

SCANNING RECEIVER TEST REPORT

Applicant	UNIDEN AMERICA CORPORATION
Address	3001 GATEWAY DRIVE SUITE 130 IRVING, TEXAS 75063 USA
FCC ID:	AMWUB383
Model Number	SDS100
Product Description	SCANNING RECEIVER
Date Sample Received	2/6/2018
Final Test Date	5/15/2018
Tested By	Tim Royer
Approved By	Franklin Rose
Test Results	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL

Report Number	Version Number	Description	Issue Date
192AUT18TestReport	Rev1	Initial Issue	05/15/2018
	Rev2	Updated tech info	05/30/2018

THE ATTACHED REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN APPROVAL OF TIMCO ENGINEERING, INC.

TABLE OF CONTENTS

GENERAL REMARKS	5
GENERAL INFORMATION	6
REPORT SUMMARY	7
RESULTS SUMMARY	7
RADIATED SPURIOUS EMISSIONS	8
Scanning Receiver Function, Scanned 30 MHz to 200 MHz	10
Test Data: Field Strength Plot, Horiz. Polarity	10
Test Data: Field Strength Table, Horiz. Polarity	11
Test Data: Field Strength Plot, Vert. Polarity	12
Test Data: Field Strength Table, Vert. Polarity	13
Tuned to 40.84 MHz, Scanned 30 MHz to 200 MHz	14
Test Data: Low End of Band 40.84 MHz Field Strength Plot, Horiz. Polarity	14
Test Data: Low End of Band 40.84 MHz Field Strength Table, Horiz. Polarity	15
Test Data: Low End of Band 40.84 MHz Field Strength Plot, Vert. Polarity	16
Test Data: Low End of Band 40.84 MHz Field Strength Table, Vert. Polarity	17
Tuned to 107.1 MHz, Scanned 30 MHz to 200 MHz	18
Test Data: Middle of Band 107.1 MHz Field Strength Plot, Horiz. Polarity	18
Test Data: Middle of Band 107.1MHz Field Strength Table, Horiz. Polarity	19
Test Data: Middle of Band 107.1MHz Field Strength Plot, Vert. Polarity	20
Test Data: Middle of Band 107.1MHz Field Strength Table, Vert. Polarity	21
Tuned to 511.9125 MHz, Scanned 30 MHz to 200 MHz	22
Test Data: Middle of Band 511.9125 MHz Field Strength Plot, Horiz. Polarity	22
Test Data: Middle of Band 511.9125MHz Field Strength Table, Horiz. Polarity	23
Test Data: Middle of Band 511.9125MHz Field Strength Plot, Vert. Polarity	24
Test Data: Middle of Band 511.9125MHz Field Strength Table, Vert. Polarity	25
Tuned to 954.9125 MHz, Scanned 30 MHz to 200 MHz	26
Test Data: High End of Band 954.9125 MHz Field Strength Plot, Horiz. Polarity	26
Test Data: High End of Band 954.9125 MHz Field Strength Table, Horiz. Polarity	27
Test Data: High End of Band 954.9125 MHz Field Strength Plot, Vert. Polarity	28
Test Data: High End of Band 954.9125 MHz Field Strength Table, Vert. Polarity	29
Scanning Receiver Function, Scanned 200 MHz to 1 GHz	30
Test Data: Field Strength Plot, Horiz. Polarity	30
Test Data: Field Strength Table, Horiz. Polarity	31
Test Data: Field Strength Plot, Vert. Polarity	32
Test Data: Field Strength Table, Vert. Polarity	33



Tuned to 40.84 MHz, Scanned 200 MHz to 1 GHz 34

 Test Data: Low End of Band 40.84 MHz Field Strength Plot, Horiz. Polarity 34

 Test Data: Low End of Band 40.84 MHz Field Strength Table, Horiz. Polarity 35

 Test Data: Low End of Band 40.84 MHz Field Strength Plot, Vert. Polarity 36

 Test Data: Low End of Band 40.84 MHz Field Strength Table, Vert. Polarity 37

Tuned to 107.1 MHz, Scanned 200 MHz to 1 GHz 38

 Test Data: Middle of Band 107.1MHz Field Strength Plot, Horiz. Polarity 38

 Test Data: Middle of Band 107.1MHz Field Strength Table, Horiz. Polarity 39

 Test Data: Middle of Band 107.1MHz Field Strength Plot, Vert. Polarity 40

 Test Data: Middle of Band 107.1MHz Field Strength Table, Vert. Polarity 41

Tuned to 511.9125 MHz, Scanned 200 MHz to 1 GHz 42

 Test Data: Middle of Band 511.9125MHz Field Strength Plot, Horiz. Polarity 42

 Test Data: Middle of Band 511.9125MHz Field Strength Table, Horiz. Polarity 43

 Test Data: Middle of Band 511.9125MHz Field Strength Plot, Vert. Polarity 44

 Test Data: Middle of Band 511.9125MHz Field Strength Table, Vert. Polarity 45

Tuned to 954.9125 MHz, Scanned 200 MHz to 1 GHz 46

 Test Data: High End of Band 954.9125 MHz Field Strength Plot, Horiz. Polarity 46

 Test Data: High End of Band 954.9125 MHz Field Strength Table, Horiz. Polarity 47

 Test Data: High End of Band 954.9125 MHz Field Strength Plot, Vert. Polarity 48

 Test Data: High End of Band 954.9125 MHz Field Strength Table, Vert. Polarity 49

Scanning Receiver Function, Scanned 1GHz to 12.5 GHz 50

 Test Data: Field Strength Plot, Horiz. Polarity 50

 Test Data: Field Strength Table, Horiz. Polarity 51

 Test Data: Field Strength Plot, Vert. Polarity 52

 Test Data: Field Strength Table, Vert. Polarity 53

Tuned to 40.84 MHz, Scanned 1 GHz to 12.5 GHz 54

 Test Data: Low End of Band 40.84 MHz Field Strength Plot, Horiz. Polarity 54

 Test Data: Low End of Band 40.84 MHz Field Strength Table, Horiz. Polarity 55

 Test Data: Low End of Band 40.84 MHz Field Strength Plot, Vert. Polarity 56

 Test Data: Low End of Band 40.84 MHz Field Strength Table, Vert. Polarity 57

Tuned to 107.1 MHz, Scanned 1 GHz to 12.5 GHz 58

 Test Data: Middle of Band 107.1MHz Field Strength Plot, Horiz. Polarity 58

 Test Data: Middle of Band 107.1MHz Field Strength Table, Horiz. Polarity 59

 Test Data: Middle of Band 107.1MHz Field Strength Plot, Vert. Polarity 60

 Test Data: Middle of Band 107.1 MHz Field Strength Table, Vert. Polarity 61



Tuned to 511.9125 MHz, Scanned 1 GHz to 12.5 GHz..... 62

 Test Data: Middle of Band 511.9125 MHz Field Strength Plot, Horiz. Polarity 62

 Test Data: Middle of Band 511.9125 MHz Field Strength Table, Horiz. Polarity..... 63

 Test Data: Middle of Band 511.9125 MHz Field Strength Plot, Vert. Polarity 64

 Test Data: Middle of Band 511.9125 MHz Field Strength Table, Vert. Polarity..... 65

Tuned to 954.9125 MHz, Scanned 1 GHz to 12.5 GHz..... 66

 Test Data: High End of Band 954.9125 MHz Field Strength Plot, Horiz. Polarity 66

 Test Data: High End of Band 954.9125 MHz Field Strength Table, Horiz. Polarity 67

 Test Data: High End of Band 954.9125 MHz Field Strength Plot, Vert. Polarity..... 68

 Test Data: High End of Band 954.9125 MHz Field Strength Table, Vert. Polarity 69

ANTENNA CONDUCTED POWER..... 70

POWER LINE CONDUCTED INTERFERENCE 71

 Test Data: Scanning, Line 1 Peak Plot 72

 Test Data: Scanning, Line 1 Peak Plot Table..... 73

 Test Data: Scanning, Line 2 Peak Plot 74

 Test Data: Scanning, Line 2 Peak Plot Table..... 75

 Test Data: Tuned to 40.84 MHz, Line 1 Peak Plot..... 76

 Test Data: Tuned to 40.84 MHz, Line 1 Peak Plot Table 77

 Test Data: Tuned to 40.84 MHz, Line 2 Peak Plot..... 78

 Test Data: Tuned to 40.84 MHz, Line 2 Peak Plot Table 79

 Test Data: Tuned to 107.1 MHz, Line 1 Peak Plot..... 80

 Test Data: Tuned to 107.1 MHz, Line 1 Peak Plot Table 81

 Test Data: Tuned to 107.1 MHz, Line 2 Peak Plot..... 82

 Test Data: Tuned to 107.1 MHz, Line 2 Peak Plot Table 83

 Test Data: Tuned to 511.9125 MHz, Line 1 Peak Plot 84

 Test Data: Tuned to 511.9125 MHz, Line 1 Peak Plot Table 85

 Test Data: Tuned to 511.9125 MHz, Line 2 Peak Plot 86

 Test Data: Tuned to 511.9125 MHz, Line 2 Peak Plot Table 87

 Test Data: Tuned to 954.9125 MHz, Line 1 Peak Plot 88

 Test Data: Tuned to 954.9125 MHz, Line 1 Peak Plot Table..... 89

 Test Data: Tuned to 954.9125 MHz, Line 2 Peak Plot 90

 Test Data: Tuned to 954.9125 MHz, Line 2 Peak Plot Table..... 91

TEST EQUIPMENT LIST 92

GENERAL REMARKS

The attached report shall not be reproduced except in full without the written permission of Timco Engineering Inc.

Summary

The device under test does:

- Fulfill the general approval requirements as identified in this test report and was selected by the customer.
- Not fulfill the general approval requirements as identified in this test report

Attestations

This equipment has been tested in accordance with the standards identified in this test report. To the best of my knowledge and belief, these tests were performed using the measurement procedures described in this report.

All instrumentation and accessories used to test products for compliance to the indicated standards are calibrated regularly in accordance with ISO 17025 requirements.

I attest that the necessary measurements were made at:

Timco Engineering Inc.
849 NW State Road 45
Newberry FL 32460



Sr. EMC Engineer
EMC-003838-NE



Tested by:

Name and Title: Tim Royer, Project Manager/Testing Engineer

Date: 5/15/2018



Reviewed and approved by:

Name and Title: Franklin Rose, Project Manager/EMC Testing Technician

Date: 05/16/2018

GENERAL INFORMATION

EUT Description	SCANNING RECEIVER
FCC ID	AMWUB383
Model Number	SDS100
Range	25.0 – 1300.0 MHz
Test Range	30 MHz – 960 MHz*
Receiver Circuit Type	Heterodyne
Lowest Internal Frequency	32.768kHz
Antenna Connector	SMA
EUT Power Source	<input type="checkbox"/> 110–120Vac/50– 60Hz
	<input type="checkbox"/> 12.6 VDC Nominal
	<input checked="" type="checkbox"/> Battery Operated Exclusively
Test Item	<input type="checkbox"/> Prototype
	<input checked="" type="checkbox"/> Pre-Production
	<input type="checkbox"/> Production
Modifications required for Testing	None
Test Site	Timco Engineering, Inc. 849 NW State Road 45 Newberry, FL 32669 Designation #: US1070

***NOTE: 15.101(b)** Receivers operating above 960 MHz or below 30 MHz, except for radar detectors and CB receivers, are exempt from complying with the technical provisions of this part but are subject to §15.5.

REPORT SUMMARY

Regulatory Standard	CFR Title 47 FCC Rule part 15B § 15.109, 15.111, & 15.121
Test Procedures	FCC Part 15.31, 15.33, 15.35 ANSI C63.4 – 2014
Operational Modes	Stopped at the Lowest, middle, and highest frequency of tuning range. In addition scanning all frequencies of tuning range
Test Frequencies	Low: 40.84 MHz
	Middle: 107.1, 511.9125 MHz
	High: 954.9125 MHz
	Scan: 25.0 – 1300.0 MHz
Setup	For radiated test the ant terminal was connected to 50Ω non radiating load through a 50 Ω coaxial cable
	For conducted test the ant terminal was connected to a EMI receiver through 50 Ω coaxial cable
Environmental Condition in the laboratory	Temperature: 24-26°C Relative humidity: 50-65% Barometric Pressure: 30.01"
Deviation from the standard/procedure	No deviation

RESULTS SUMMARY

Requirement	Pass/Fail
15.109 Radiated Emissions	Pass
15.111 Receiver Conducted Power	Pass
15.121 38 dB Rejection	NA ⁽¹⁾

Notes:

- 1) The receiver is digital and is incapable of producing a SINAD output.

RADIATED SPURIOUS EMISSIONS

Rule Part No.: FCC Part 15 Subpart B

Requirements: FCC Part 15.109(a) Radiated Emission Limit

Class B Field Strength Limits @ 3 Meters	
Frequency (MHz)	Level (dBuV/m)
30 – 88	40.0
80 – 216	43.5
216 – 960	46.0
Above 960	54.0

FCC Part 15.109(f) Radiated Emission Limit

For a receiver which employs terminals for the connection of an external receiving antenna, the receiver shall be tested to demonstrate compliance with the provisions of this section with an antenna connected to the antenna terminals unless the antenna conducted power is measured as specified in §15.111(a).

Procedure: FCC Part 15.33(b)(3) Frequency range of radiated measurements

FCC Part 15.35(a) Measurement detector functions and bandwidths

ANSI C63.4 Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment 9 kHz to 40 GHz

§ 6.2 Operating conditions

§ 6.3 Arrangement of EUT

§ 8.3.1 Exploratory radiated emissions measurements

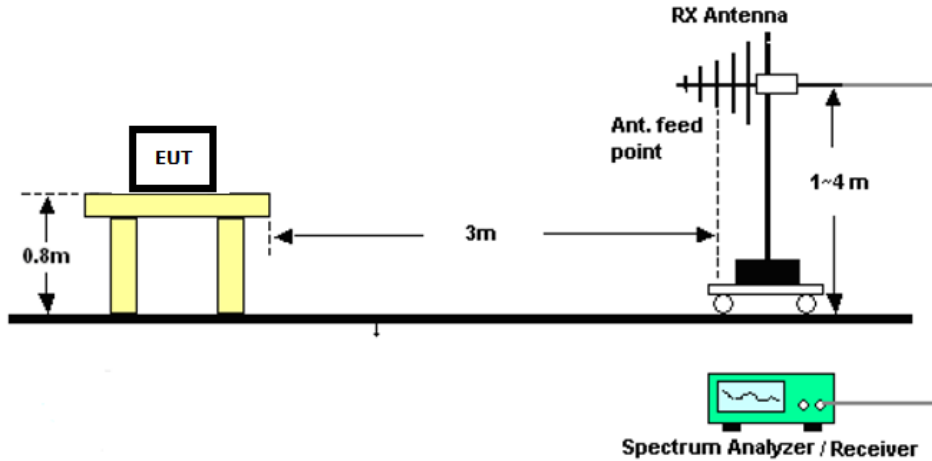
§ 8.3.2 Final radiated emission measurements

Configuration: The scanner receiver spurious emissions are to be measured when the receiver is in the scanning mode and repeated when the scanning is stopped.

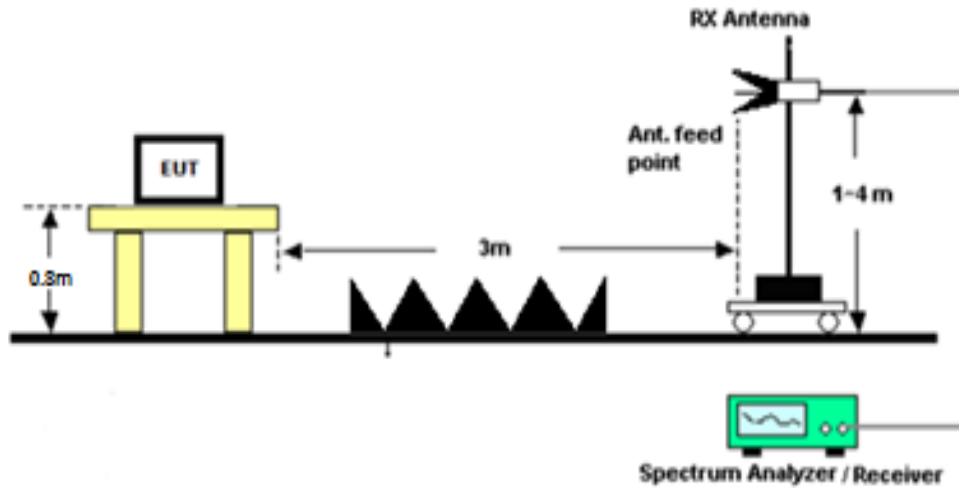
RADIATED SPURIOUS EMISSIONS

Setup:

Emissions 30 – 1000 MHz



Emissions above 1 GHz



RADIATED SPURIOUS EMISSIONS

Scanning Receiver Function, Scanned 30 MHz to 200 MHz

Test Data: Field Strength Plot, Horiz. Polarity



15.May 18 09:55

Test Spec CISPR 22 Radiated Disturbances

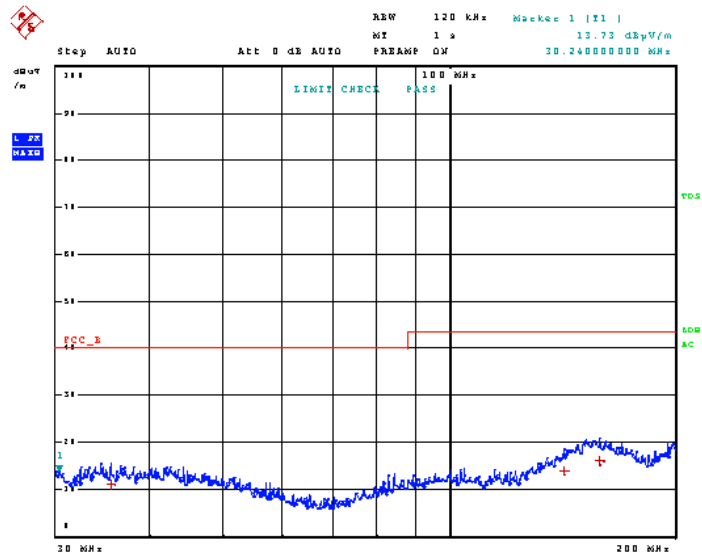
Polarity

Vertical

Stepped Scan (1 Range)

Scan Start: 30 MHz
 Scan Stop: 200 MHz
 Detector: Trace 1: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 μ s	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: Field Strength Table, Horiz. Polarity

15.May 18 09:55

Test Spec CISPR 22 Radiated Disturbances

Polarity

Vertical

Final Measurement

Meas Time: 1 s

Margin: 25 dB

Subranges: 3

Trace	Frequency	Level (dB μ V/m)	Detector	Delta Limit/dB
1	35.40000000 MHz	11.12	Quasi Peak	-28.88
1	142.16000000 MHz	13.92	Quasi Peak	-29.58
1	158.92000000 MHz	15.99	Quasi Peak	-27.51

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Test Data: Field Strength Plot, Vert. Polarity



15.May 18 09:55

Test Spec CISPR 22 Radiated Disturbances

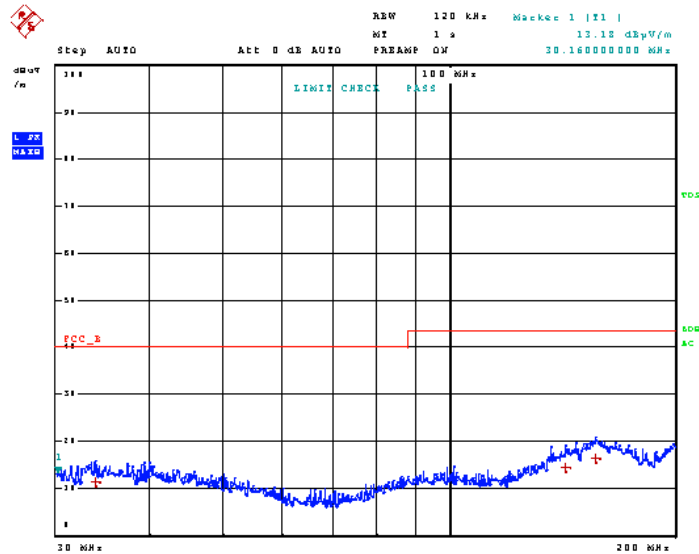
Polarity

Vertical

Stepped Scan (1 Range)

Scan Start: 30 MHz
 Scan Stop: 200 MHz
 Detector: Trace 1: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 μ s	Auto	20 dB	INPUT1



Page 1 of 2



RADIATED SPURIOUS EMISSIONS

Test Data: Field Strength Table, Vert. Polarity

15.May 18 09:55

Test Spec CISPR 22 Radiated Disturbances

Polarity

Vertical

Final Measurement

Meas Time: 1 s

Margin: 25 dB

Subranges: 3

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	33.800000000 MHz	11.20	Quasi Peak	-28.80
1	143.320000000 MHz	14.30	Quasi Peak	-29.20
1	156.920000000 MHz	16.20	Quasi Peak	-27.30

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Tuned to 40.84 MHz, Scanned 30 MHz to 200 MHz

Test Data: Low End of Band 40.84 MHz Field Strength Plot, Horiz. Polarity



15.May 18 09:57

Test Spec: CISPR 22 Radiated Disturbances

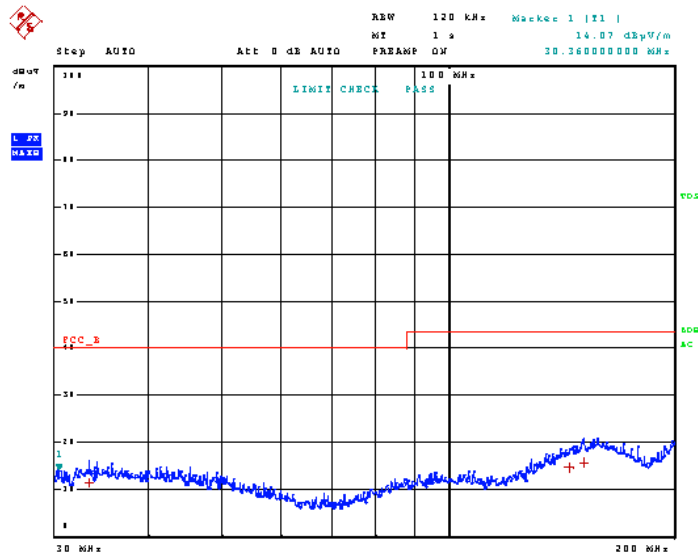
Polarity: Vertical

Vertical

Stepped Scan (1 Range)

Scan Start: 30 MHz
 Scan Stop: 200 MHz
 Detector: Trace 1: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 μ s	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: Low End of Band 40.84 MHz Field Strength Table, Horiz. Polarity

15.May 18 09:57

Test Spec CISPR 22 Radiated Disturbances

Polarity

Vertical

Final Measurement

Meas Time: 1 s

Margin: 25 dB

Subranges: 3

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	33.200000000 MHz	11.40	Quasi Peak	-28.60
1	145.000000000 MHz	14.70	Quasi Peak	-28.80
1	151.400000000 MHz	15.69	Quasi Peak	-27.81

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Test Data: Low End of Band 40.84 MHz Field Strength Plot, Vert. Polarity



15.May 18 09:59

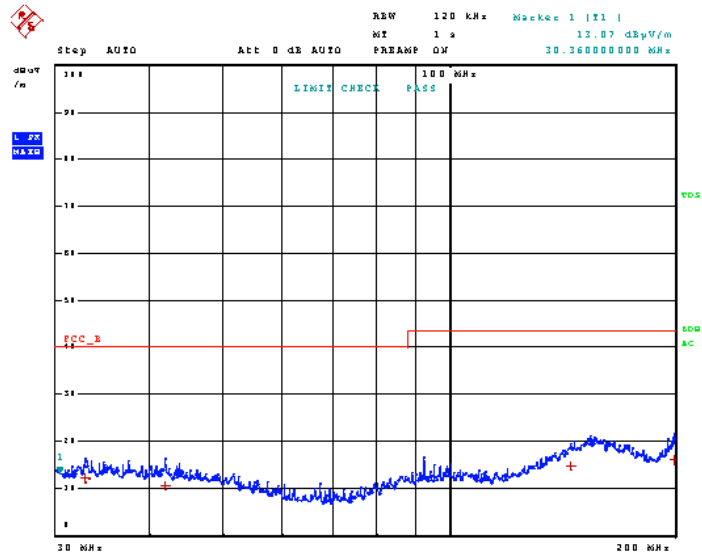
Test Spec CISPR 22 Radiated Disturbances

Polarity
Vertical

Stepped Scan (1 Range)

Scan Start: 30 MHz
Scan Stop: 200 MHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 μ s	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: Low End of Band 40.84 MHz Field Strength Table, Vert. Polarity

15.May 18 09:59

Test Spec CISPR 22 Radiated Disturbances

Polarity

Vertical

Final Measurement

Meas Time: 1 s

Margin: 25 dB

Subranges: 4

Trace	Frequency	Level (dBμV/m)	Detector	Delta Limit/dB
1	32.72000000 MHz	12.16	Quasi Peak	-27.84
1	41.84000000 MHz	10.70	Quasi Peak	-29.30
1	145.40000000 MHz	14.84	Quasi Peak	-28.66
1	199.52000000 MHz	16.01	Quasi Peak	-27.49

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Tuned to 107.1 MHz, Scanned 30 MHz to 200 MHz

Test Data: Middle of Band 107.1 MHz Field Strength Plot, Horiz. Polarity



15.May 18 10:02

Test Spec: CISPR 22 Radiated Disturbances

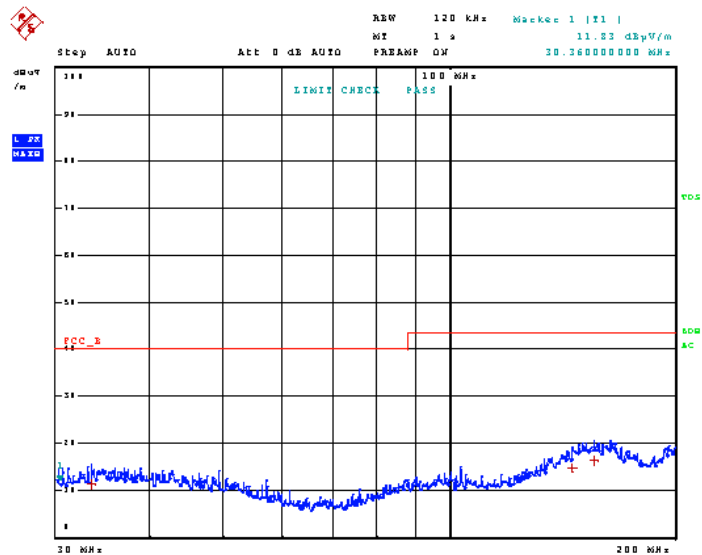
Polarity: Vertical

Vertical

Stepped Scan (1 Range)

Scan Start: 30 MHz
 Scan Stop: 200 MHz
 Detector: Trace 1: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 μ s	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: Middle of Band 107.1MHz Field Strength Table, Horiz. Polarity

15.May 18 10:02

Test Spec CISPR 22 Radiated Disturbances

Polarity

Vertical

Final Measurement

Meas Time: 1 s

Margin: 25 dB

Subranges: 3

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	33.280000000 MHz	11.34	Quasi Peak	-28.66
1	145.600000000 MHz	14.84	Quasi Peak	-28.66
1	155.800000000 MHz	16.27	Quasi Peak	-27.23

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Test Data: Middle of Band 107.1MHz Field Strength Plot, Vert. Polarity



15.May 18 10:09

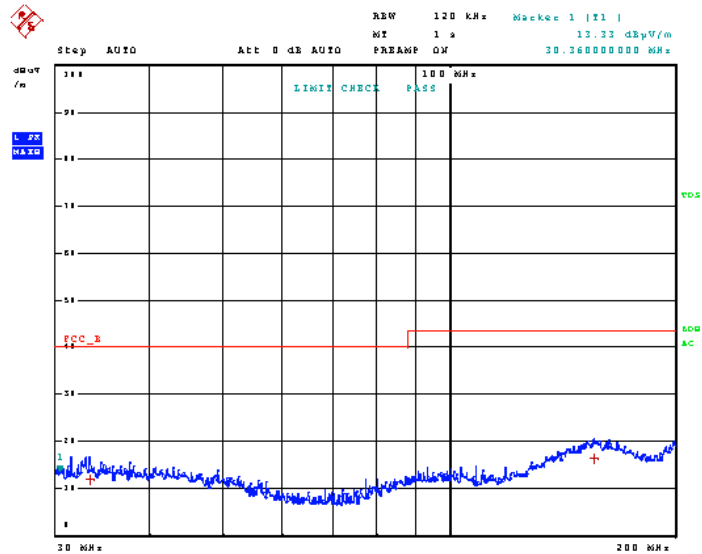
Test Spec CISPR 22 Radiated Disturbances

Polarity
Vertical

Stepped Scan (1 Range)

Scan Start: 30 MHz
Scan Stop: 200 MHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 μ s	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: Middle of Band 107.1MHz Field Strength Table, Vert. Polarity

15.May 18 10:02

Test Spec CISPR 22 Radiated Disturbances

Polarity

Vertical

Final Measurement

Meas Time: 1 s

Margin: 25 dB

Subranges: 3

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	33.280000000 MHz	11.34	Quasi Peak	-28.66
1	145.600000000 MHz	14.84	Quasi Peak	-28.66
1	155.800000000 MHz	16.27	Quasi Peak	-27.23

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Tuned to 511.9125 MHz, Scanned 30 MHz to 200 MHz

Test Data: Middle of Band 511.9125 MHz Field Strength Plot, Horiz. Polarity



15.May 18 10:02

Test Spec: CISPR 22 Radiated Disturbances

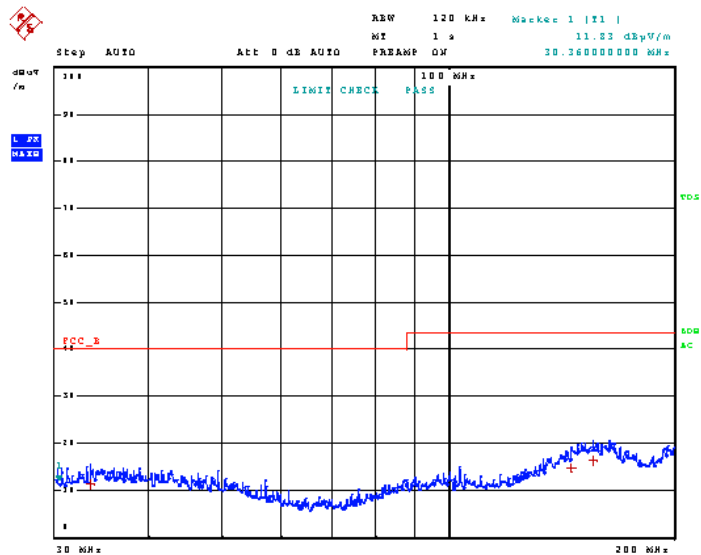
Polarity: Vertical

Vertical

Stepped Scan (1 Range)

Scan Start: 30 MHz
 Scan Stop: 200 MHz
 Detector: Trace 1: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 μ s	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: Middle of Band 511.9125MHz Field Strength Table, Horiz. Polarity

15.May 18 10:02

Test Spec CISPR 22 Radiated Disturbances

Polarity

Vertical

Final Measurement

Meas Time: 1 s

Margin: 25 dB

Subranges: 3

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	33.280000000 MHz	11.34	Quasi Peak	-28.66
1	145.600000000 MHz	14.84	Quasi Peak	-28.66
1	155.800000000 MHz	16.27	Quasi Peak	-27.23

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Test Data: Middle of Band 511.9125MHz Field Strength Plot, Vert. Polarity



15.May 18 10:01

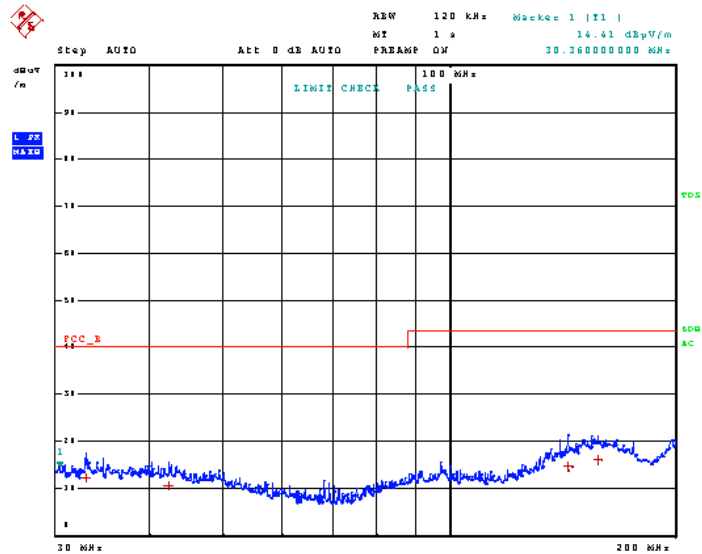
Test Spec CISPR 22 Radiated Disturbances

Polarity
Vertical

Stepped Scan (1 Range)

Scan Start: 30 MHz
Scan Stop: 200 MHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 μ s	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: Middle of Band 511.9125MHz Field Strength Table, Vert. Polarity

15.May 18 10:01

Test Spec CISPR 22 Radiated Disturbances

Polarity

Vertical

Final Measurement

Meas Time: 1 s

Margin: 25 dB

Subranges: 4

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	32.840000000 MHz	12.22	Quasi Peak	-27.78
1	42.200000000 MHz	10.66	Quasi Peak	-29.34
1	143.960000000 MHz	14.53	Quasi Peak	-28.97
1	157.920000000 MHz	16.14	Quasi Peak	-27.36

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Tuned to 954.9125 MHz, Scanned 30 MHz to 200 MHz

Test Data: High End of Band 954.9125 MHz Field Strength Plot, Horiz. Polarity



15.May 18 10:04

Test Spec CISPR 22 Radiated Disturbances

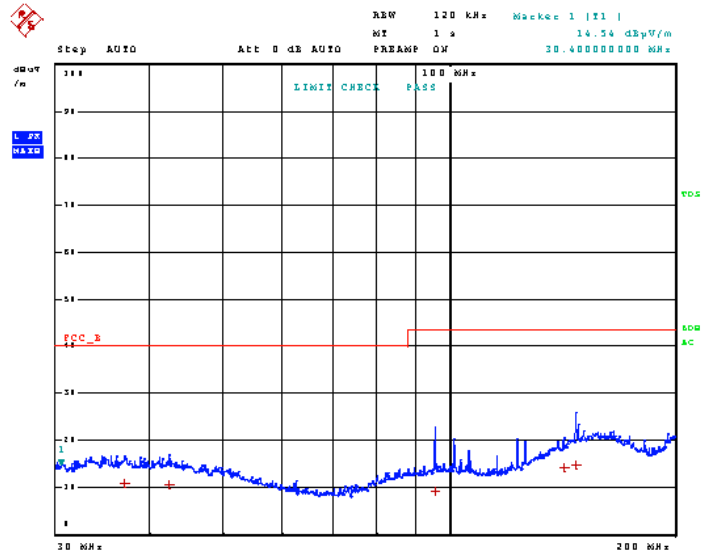
Polarity

Vertical

Stepped Scan (1 Range)

Scan Start: 30 MHz
 Scan Stop: 200 MHz
 Detector: Trace 1: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 μ s	Auto	20 dB	INPUT1



RADIATED SPURIOUS EMISSIONS

Test Data: High End of Band 954.9125 MHz Field Strength Table, Horiz. Polarity

15.May 18 10:04

Test Spec CISPR 22 Radiated Disturbances

Polarity

Vertical

Final Measurement

Meas Time: 1 s

Margin: 25 dB

Subranges: 5

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	37.000000000 MHz	10.82	Quasi Peak	-29.18
1	42.440000000 MHz	10.53	Quasi Peak	-29.47
1	95.800000000 MHz	9.04	Quasi Peak	-34.46
1	142.240000000 MHz	14.11	Quasi Peak	-29.39
1	147.360000000 MHz	14.87	Quasi Peak	-28.63

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Test Data: High End of Band 954.9125 MHz Field Strength Plot, Vert. Polarity



15.May 18 10:09

Test Spec: CISPR 22 Radiated Disturbances

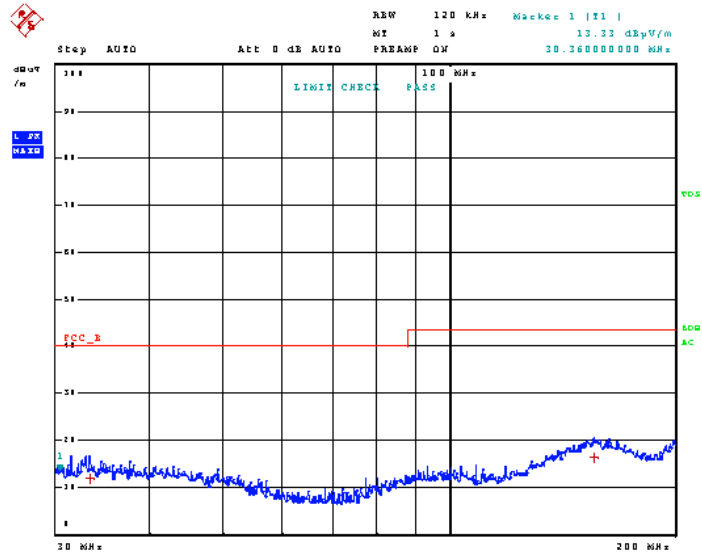
Polarity: Vertical

Vertical

Stepped Scan (1 Range)

Scan Start: 30 MHz
 Scan Stop: 200 MHz
 Detector: Trace 1: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 μ s	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: High End of Band 954.9125 MHz Field Strength Table, Vert. Polarity

15.May 18 10:09

Test Spec CISPR 22 Radiated Disturbances

Polarity

Vertical

Final Measurement

Meas Time: 1 s

Margin: 25 dB

Subranges: 2

Trace	Frequency	Level (dB μ V/m)	Detector	Delta Limit/dB
1	33.24000000 MHz	11.85	Quasi Peak	-28.15
1	155.60000000 MHz	16.19	Quasi Peak	-27.31

Page 2 of 2

Applicant: UNIDEN AMERICA CORPORATION
FCC ID: AMWUB383
Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)

Page 29 of 92

RADIATED SPURIOUS EMISSIONS

Scanning Receiver Function, Scanned 200 MHz to 1 GHz

Test Data: Field Strength Plot, Horiz. Polarity



15.May 18 09:53

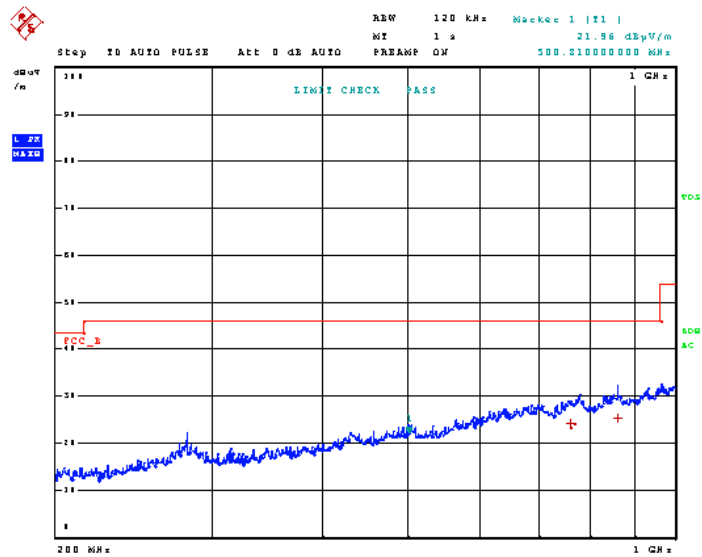
Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: Field Strength Table, Horiz. Polarity

15.May 18 09:53

Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 2

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	761.990000000 MHz	24.12	Quasi Peak	-21.88
1	860.990000000 MHz	25.22	Quasi Peak	-20.78

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Test Data: Field Strength Plot, Vert. Polarity



15.May 18 09:47

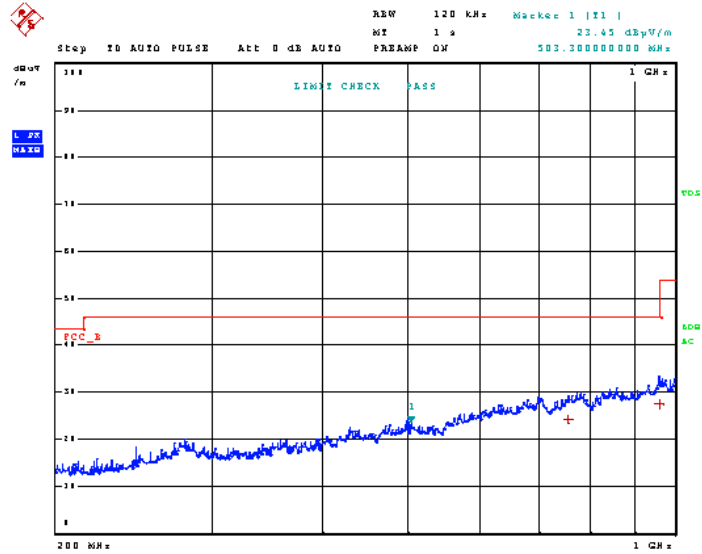
Test Spec: CISPR 22 Radiated Disturbances

Polarity: Horizontal

Time Domain Scan (1 Range)

Scan Start: 200 MHz
 Scan Stop: 1 GHz
 Detector: Trace 1: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 μ s	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: Field Strength Table, Vert. Polarity

15.May 18 09:52

Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 4

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	419.780000000 MHz	21.71	Quasi Peak	-24.29
1	483.830000000 MHz	18.46	Quasi Peak	-27.54
1	759.530000000 MHz	24.11	Quasi Peak	-21.89
1	957.320000000 MHz	27.21	Quasi Peak	-18.79

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Tuned to 40.84 MHz, Scanned 200 MHz to 1 GHz

Test Data: Low End of Band 40.84 MHz Field Strength Plot, Horiz. Polarity



15.May 18 09:46

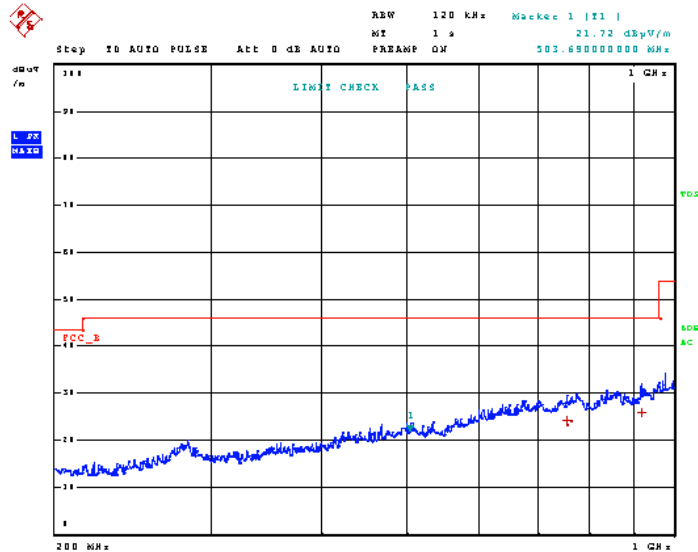
Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 μ s	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: Low End of Band 40.84 MHz Field Strength Table, Horiz. Polarity

15.May 18 09:46

Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 2

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	755.960000000 MHz	24.15	Quasi Peak	-21.85
1	919.370000000 MHz	25.87	Quasi Peak	-20.13

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Test Data: Low End of Band 40.84 MHz Field Strength Plot, Vert. Polarity



15.May 18 09:39

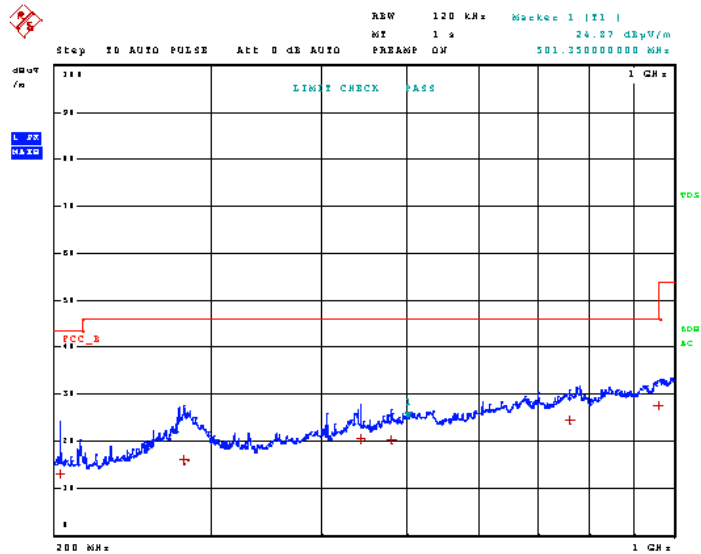
Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: Low End of Band 40.84 MHz Field Strength Table, Vert. Polarity

15.May 18 09:39

Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 6

Trace	Frequency	Level (dB μ V/m)	Detector	Delta Limit/dB
1	202.760000000 MHz	13.06	Quasi Peak	-30.44
1	279.800000000 MHz	16.16	Quasi Peak	-29.84
1	442.340000000 MHz	20.42	Quasi Peak	-25.58
1	479.570000000 MHz	20.35	Quasi Peak	-25.65
1	762.230000000 MHz	24.43	Quasi Peak	-21.57
1	958.610000000 MHz	27.53	Quasi Peak	-18.47

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Tuned to 107.1 MHz, Scanned 200 MHz to 1 GHz

Test Data: Middle of Band 107.1MHz Field Strength Plot, Horiz. Polarity



15.May 18 09:51

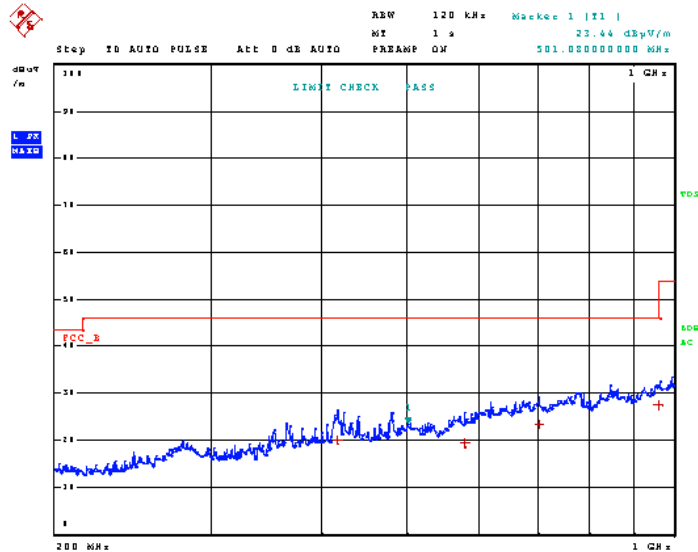
Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 μ s	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: Middle of Band 107.1MHz Field Strength Table, Horiz. Polarity

15.May 18 09:51

Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 4

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	416.630000000 MHz	20.12	Quasi Peak	-25.88
1	579.650000000 MHz	19.49	Quasi Peak	-26.51
1	704.120000000 MHz	23.42	Quasi Peak	-22.58
1	959.690000000 MHz	27.47	Quasi Peak	-18.53

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Test Data: Middle of Band 107.1MHz Field Strength Plot, Vert. Polarity



15.May 18 09:39

Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: Middle of Band 107.1MHz Field Strength Table, Vert. Polarity

15.May 18 09:48

Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 2

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	759.98000000 MHz	24.11	Quasi Peak	-21.89
1	954.32000000 MHz	26.78	Quasi Peak	-19.22

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Tuned to 511.9125 MHz, Scanned 200 MHz to 1 GHz

Test Data: Middle of Band 511.9125MHz Field Strength Plot, Horiz. Polarity



15.May 18 09:47

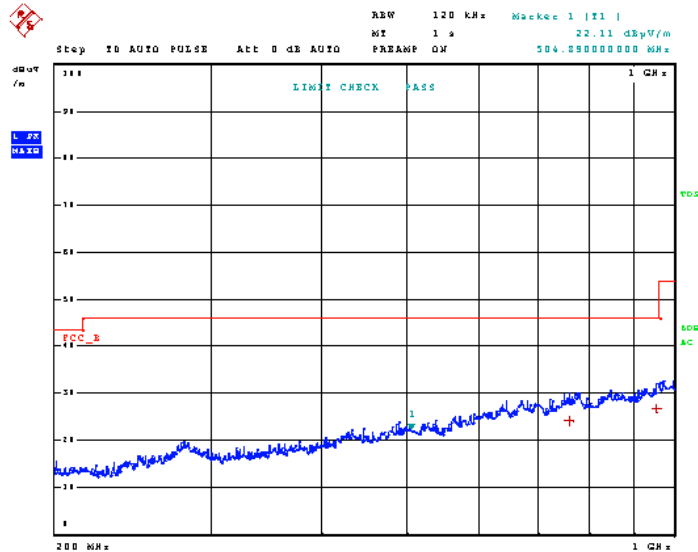
Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: Middle of Band 511.9125MHz Field Strength Table, Horiz. Polarity

15.May 18 09:47

Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 2

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	760.670000000 MHz	24.09	Quasi Peak	-21.91
1	955.340000000 MHz	26.88	Quasi Peak	-19.12

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Test Data: Middle of Band 511.9125MHz Field Strength Plot, Vert. Polarity



15.May 18 09:47

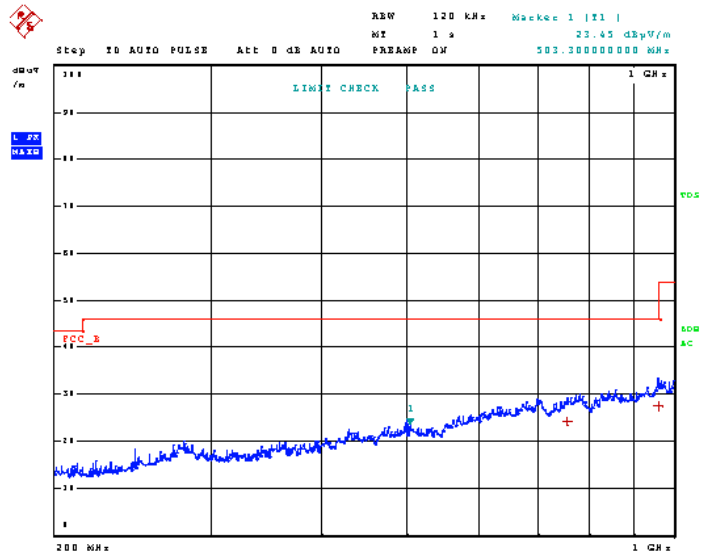
Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: Middle of Band 511.9125MHz Field Strength Table, Vert. Polarity

15.May 18 09:39

Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 6

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	202.760000000 MHz	13.06	Quasi Peak	-30.44
1	279.800000000 MHz	16.16	Quasi Peak	-29.84
1	442.340000000 MHz	20.42	Quasi Peak	-25.58
1	479.570000000 MHz	20.35	Quasi Peak	-25.65
1	762.230000000 MHz	24.43	Quasi Peak	-21.57
1	958.610000000 MHz	27.53	Quasi Peak	-18.47

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Tuned to 954.9125 MHz, Scanned 200 MHz to 1 GHz

Test Data: High End of Band 954.9125 MHz Field Strength Plot, Horiz. Polarity



15.May 18 09:51

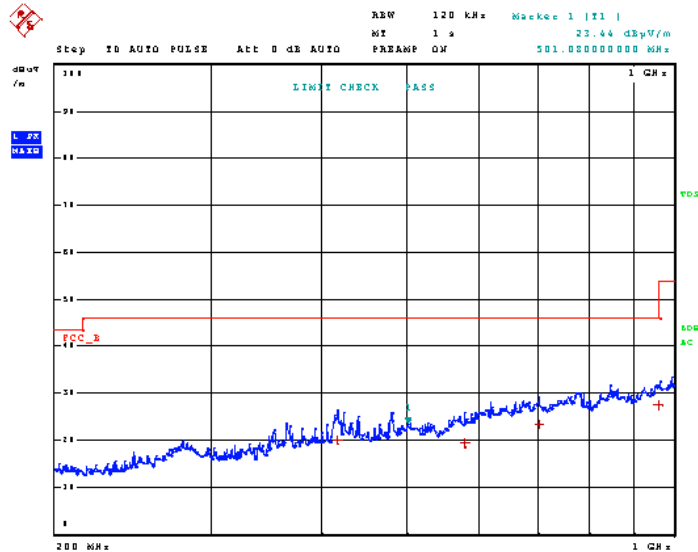
Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 μ s	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: High End of Band 954.9125 MHz Field Strength Table, Horiz. Polarity

15.May 18 09:51

Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 4

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	416.630000000 MHz	20.12	Quasi Peak	-25.88
1	579.650000000 MHz	19.49	Quasi Peak	-26.51
1	704.120000000 MHz	23.42	Quasi Peak	-22.58
1	959.690000000 MHz	27.47	Quasi Peak	-18.53

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Test Data: High End of Band 954.9125 MHz Field Strength Plot, Vert. Polarity



15.May 18 09:48

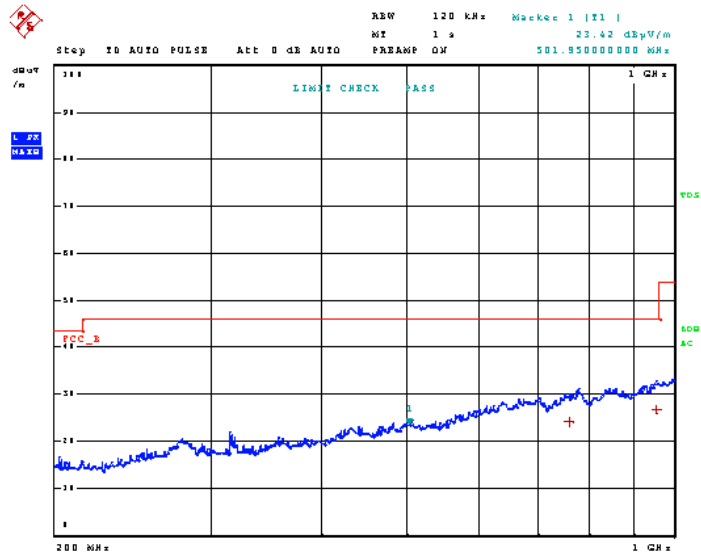
Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Time Domain Scan (1 Range)

Scan Start: 200 MHz
Scan Stop: 1 GHz
Detector: Trace 1: MAX PEAK
Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
200.000000 MHz	1.000000 GHz	30.00 kHz	120.00 kHz	50 µs	Auto	20 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: High End of Band 954.9125 MHz Field Strength Table, Vert. Polarity

15.May 18 09:48

Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 2

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	759.980000000 MHz	24.11	Quasi Peak	-21.89
1	954.320000000 MHz	26.78	Quasi Peak	-19.22

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

Scanning Receiver Function, Scanned 1GHz to 12.5 GHz

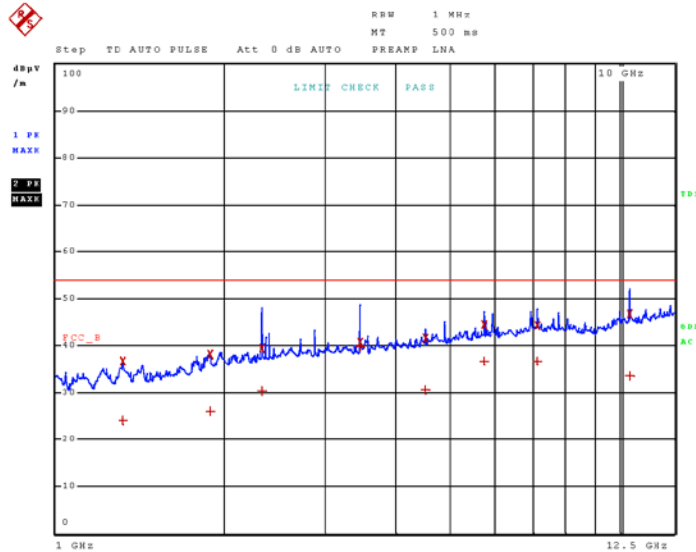
Test Data: Field Strength Plot, Horiz. Polarity

15.May 18 09:05

Time Domain Scan (1 Range)

Scan Start: 1 GHz
 Scan Stop: 12.5 GHz
 Detector: Trace 1: MAX PEAK Trace 2: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
1.000000 GHz	12.500000 GHz	250.00 kHz	1.00 MHz	100 μ s	Auto	35 dB	INPUT1



RADIATED SPURIOUS EMISSIONS

Test Data: Field Strength Table, Horiz. Polarity

15.May 18 09:05

Final Measurement

Meas Time: 500 ms
 Margin: 40 dB
 Subranges: 16

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.318250000 GHz	24.12	CISPR Averag	-29.88
2	1.318250000 GHz	36.65	Max Peak	
1	1.877500000 GHz	25.85	CISPR Averag	-28.15
2	1.877500000 GHz	38.15	Max Peak	
1	2.322500000 GHz	30.35	CISPR Averag	-23.65
2	2.322500000 GHz	39.34	Max Peak	
1	3.469250000 GHz	39.83	CISPR Averag	-14.17
2	3.469250000 GHz	40.73	Max Peak	
1	4.532750000 GHz	30.52	CISPR Averag	-23.48
2	4.532750000 GHz	41.45	Max Peak	
1	5.741500000 GHz	36.75	CISPR Averag	-17.25
2	5.741500000 GHz	44.44	Max Peak	
1	7.161250000 GHz	36.55	CISPR Averag	-17.45
2	7.161250000 GHz	44.12	Max Peak	
1	10.407500000 GHz	33.61	CISPR Averag	-20.39
2	10.407500000 GHz	46.78	Max Peak	

RADIATED SPURIOUS EMISSIONS

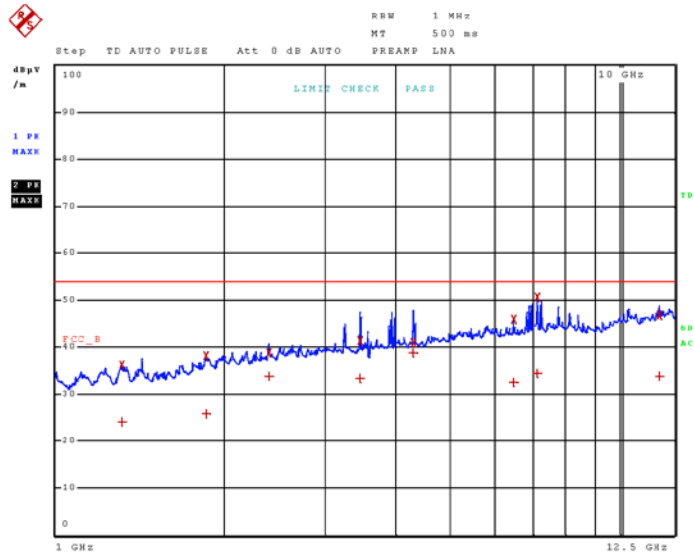
Test Data: Field Strength Plot, Vert. Polarity

15.May 18 09:02

Time Domain Scan (1 Range)

Scan Start: 1 GHz
 Scan Stop: 12.5 GHz
 Detector: Trace 1: MAX PEAK Trace 2: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
1.000000 GHz	12.500000 GHz	250.00 kHz	1.00 MHz	100 μs	Auto	35 dB	INPUT1



RADIATED SPURIOUS EMISSIONS

Test Data: Field Strength Table, Vert. Polarity

15.May 18 09:02

Final Measurement

Meas Time: 500 ms
 Margin: 40 dB
 Subranges: 16

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.308750000 GHz	24.05	CISPR Averag	-29.95
2	1.308750000 GHz	36.24	Max Peak	
1	1.847250000 GHz	25.78	CISPR Averag	-28.22
2	1.847250000 GHz	38.20	Max Peak	
1	2.387250000 GHz	33.72	CISPR Averag	-20.28
2	2.387250000 GHz	38.84	Max Peak	
1	3.469250000 GHz	33.34	CISPR Averag	-20.66
2	3.469250000 GHz	41.25	Max Peak	
1	4.312750000 GHz	38.75	CISPR Averag	-15.25
2	4.312750000 GHz	40.88	Max Peak	
1	6.486750000 GHz	32.37	CISPR Averag	-21.63
2	6.486750000 GHz	45.88	Max Peak	
1	7.161250000 GHz	34.27	CISPR Averag	-19.73
2	7.161250000 GHz	50.51	Max Peak	
1	11.764750000 GHz	33.71	CISPR Averag	-20.29
2	11.764750000 GHz	46.65	Max Peak	

RADIATED SPURIOUS EMISSIONS

Tuned to 40.84 MHz, Scanned 1 GHz to 12.5 GHz

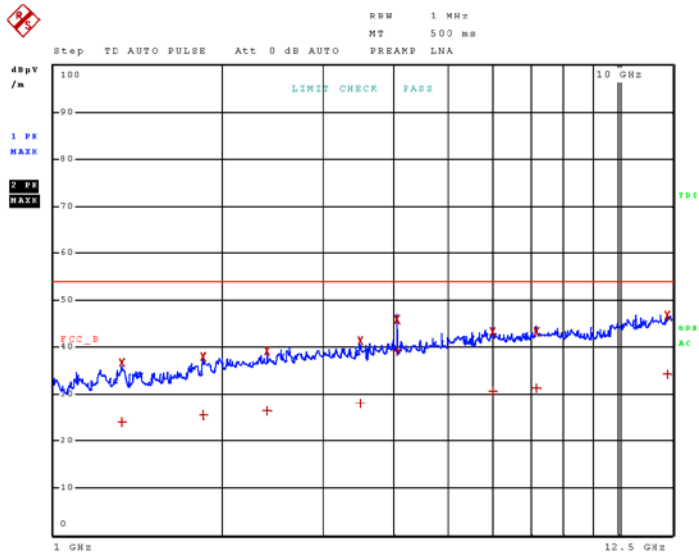
Test Data: Low End of Band 40.84 MHz Field Strength Plot, Horiz. Polarity

15.May 18 09:24

Time Domain Scan (1 Range)

Scan Start: 1 GHz
 Scan Stop: 12.5 GHz
 Detector: Trace 1: MAX PEAK Trace 2: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
1.000000 GHz	12.500000 GHz	250.00 kHz	1.00 MHz	100 μ s	Auto	35 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: Low End of Band 40.84 MHz Field Strength Table, Horiz. Polarity

15.May 18 09:24

Final Measurement

Meas Time: 500 ms
Margin: 40 dB
Subranges: 16

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.324250000 GHz	24.14	CISPR Averag	-29.86
2	1.324250000 GHz	36.56	Max Peak	
1	1.845750000 GHz	25.47	CISPR Averag	-28.53
2	1.845750000 GHz	37.83	Max Peak	
1	2.383750000 GHz	26.26	CISPR Averag	-27.74
2	2.383750000 GHz	39.22	Max Peak	
1	3.485750000 GHz	27.97	CISPR Averag	-26.03
2	3.485750000 GHz	41.27	Max Peak	
1	4.057500000 GHz	39.08	CISPR Averag	-14.92
2	4.057500000 GHz	45.95	Max Peak	
1	6.003000000 GHz	30.55	CISPR Averag	-23.45
2	6.003000000 GHz	43.09	Max Peak	
1	7.193000000 GHz	31.10	CISPR Averag	-22.90
2	7.193000000 GHz	43.24	Max Peak	
1	12.266750000 GHz	34.04	CISPR Averag	-19.96
2	12.266750000 GHz	46.83	Max Peak	

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

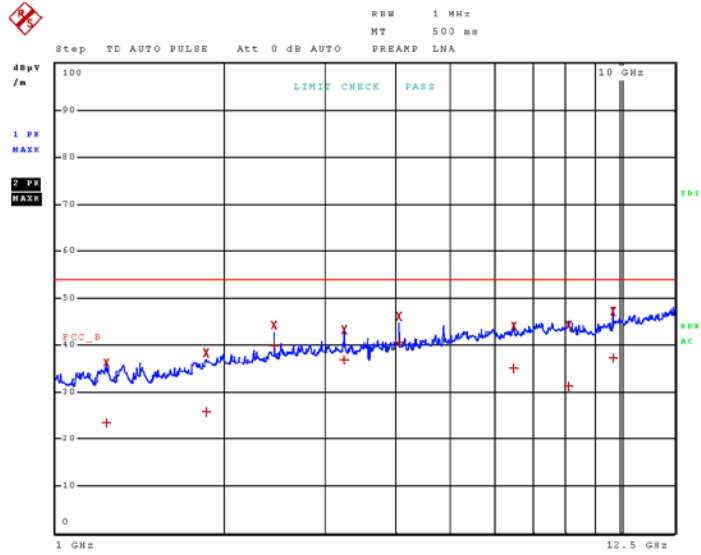
Test Data: Low End of Band 40.84 MHz Field Strength Plot, Vert. Polarity

15.May 18 09:22

Time Domain Scan (1 Range)

Scan Start: 1 GHz
 Scan Stop: 12.5 GHz
 Detector: Trace 1: MAX PEAK Trace 2: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
1.000000 GHz	12.500000 GHz	250.00 kHz	1.00 MHz	100 μs	Auto	35 dB	INPUT1



RADIATED SPURIOUS EMISSIONS

Test Data: Low End of Band 40.84 MHz Field Strength Table, Vert. Polarity

15.May 18 09:22

Final Measurement

Meas Time: 500 ms
 Margin: 40 dB
 Subranges: 16

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.230000000 GHz	23.44	CISPR Averag	-30.56
2	1.230000000 GHz	36.18	Max Peak	
1	1.850250000 GHz	25.79	CISPR Averag	-28.21
2	1.850250000 GHz	38.35	Max Peak	
1	2.434500000 GHz	39.83	CISPR Averag	-14.17
2	2.434500000 GHz	44.30	Max Peak	
1	3.246000000 GHz	36.92	CISPR Averag	-17.08
2	3.246000000 GHz	43.18	Max Peak	
1	4.057500000 GHz	40.49	CISPR Averag	-13.51
2	4.057500000 GHz	46.17	Max Peak	
1	6.492250000 GHz	34.99	CISPR Averag	-19.01
2	6.492250000 GHz	44.11	Max Peak	
1	8.103000000 GHz	31.10	CISPR Averag	-22.90
2	8.103000000 GHz	44.24	Max Peak	
1	9.738000000 GHz	37.24	CISPR Averag	-16.76
2	9.738000000 GHz	47.15	Max Peak	

RADIATED SPURIOUS EMISSIONS

Tuned to 107.1 MHz, Scanned 1 GHz to 12.5 GHz

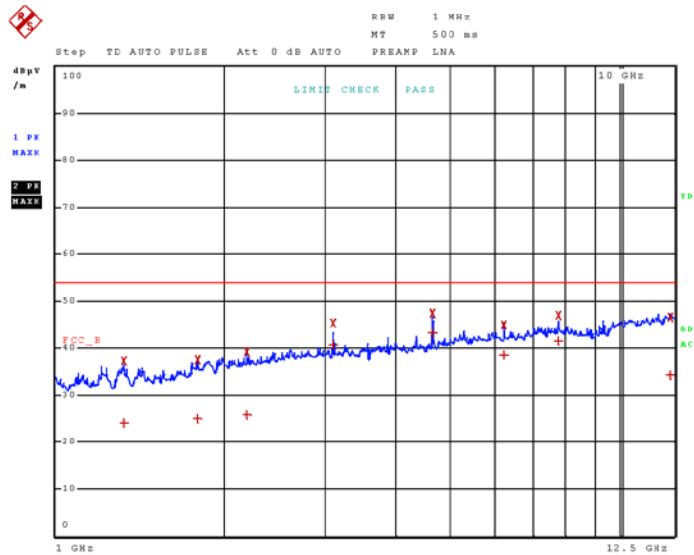
Test Data: Middle of Band 107.1MHz Field Strength Plot, Horiz. Polarity

15.May 18 09:19

Time Domain Scan (1 Range)

Scan Start: 1 GHz
 Scan Stop: 12.5 GHz
 Detector: Trace 1: MAX PEAK Trace 2: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
1.000000 GHz	12.500000 GHz	250.00 kHz	1.00 MHz	100 μ s	Auto	35 dB	INPUT1



RADIATED SPURIOUS EMISSIONS

Test Data: Middle of Band 107.1MHz Field Strength Table, Horiz. Polarity

15.May 18 09:19

Final Measurement

Meas Time: 500 ms
 Margin: 40 dB
 Subranges: 16

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.323250000 GHz	24.13	CISPR Averag	-29.87
2	1.323250000 GHz	37.30	Max Peak	
1	1.781250000 GHz	24.96	CISPR Averag	-29.04
2	1.781250000 GHz	37.43	Max Peak	
1	2.182000000 GHz	25.70	CISPR Averag	-28.30
2	2.182000000 GHz	39.09	Max Peak	
1	3.109750000 GHz	40.66	CISPR Averag	-13.34
2	3.109750000 GHz	45.23	Max Peak	
1	4.664750000 GHz	43.23	CISPR Averag	-10.77
2	4.664750000 GHz	47.42	Max Peak	
1	6.219500000 GHz	38.63	CISPR Averag	-15.37
2	6.219500000 GHz	44.91	Max Peak	
1	7.774500000 GHz	41.41	CISPR Averag	-12.59
2	7.774500000 GHz	46.98	Max Peak	
1	12.280750000 GHz	34.07	CISPR Averag	-19.93
2	12.280750000 GHz	46.53	Max Peak	

RADIATED SPURIOUS EMISSIONS

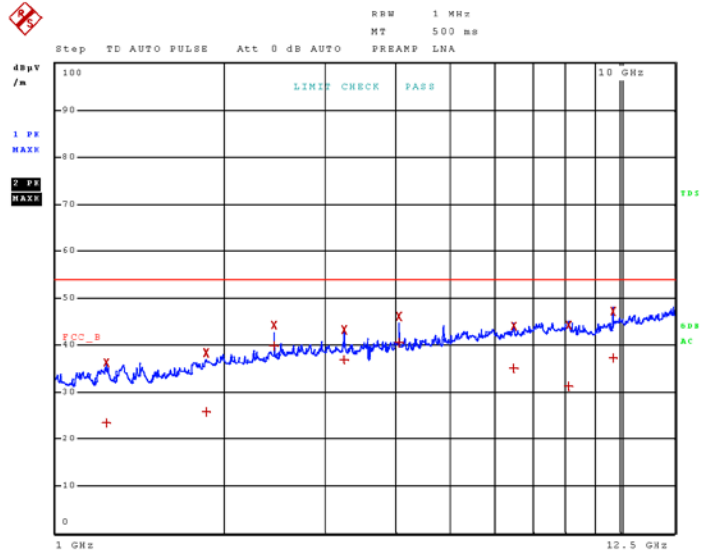
Test Data: Middle of Band 107.1MHz Field Strength Plot, Vert. Polarity

15.May 18 09:22

Time Domain Scan (1 Range)

Scan Start: 1 GHz
 Scan Stop: 12.5 GHz
 Detector: Trace 1: MAX PEAK Trace 2: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
1.000000 GHz	12.500000 GHz	250.00 kHz	1.00 MHz	100 μs	Auto	35 dB	INPUT1



RADIATED SPURIOUS EMISSIONS

Test Data: Middle of Band 107.1 MHz Field Strength Table, Vert. Polarity

15.May 18 09:22

Final Measurement

Meas Time: 500 ms
 Margin: 40 dB
 Subranges: 16

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.230000000 GHz	23.44	CISPR Averag	-30.56
2	1.230000000 GHz	36.18	Max Peak	
1	1.850250000 GHz	25.79	CISPR Averag	-28.21
2	1.850250000 GHz	38.35	Max Peak	
1	2.434500000 GHz	39.83	CISPR Averag	-14.17
2	2.434500000 GHz	44.30	Max Peak	
1	3.246000000 GHz	36.92	CISPR Averag	-17.08
2	3.246000000 GHz	43.18	Max Peak	
1	4.057500000 GHz	40.49	CISPR Averag	-13.51
2	4.057500000 GHz	46.17	Max Peak	
1	6.492250000 GHz	34.99	CISPR Averag	-19.01
2	6.492250000 GHz	44.11	Max Peak	
1	8.103000000 GHz	31.10	CISPR Averag	-22.90
2	8.103000000 GHz	44.24	Max Peak	
1	9.738000000 GHz	37.24	CISPR Averag	-16.76
2	9.738000000 GHz	47.15	Max Peak	

RADIATED SPURIOUS EMISSIONS

Tuned to 511.9125 MHz, Scanned 1 GHz to 12.5 GHz

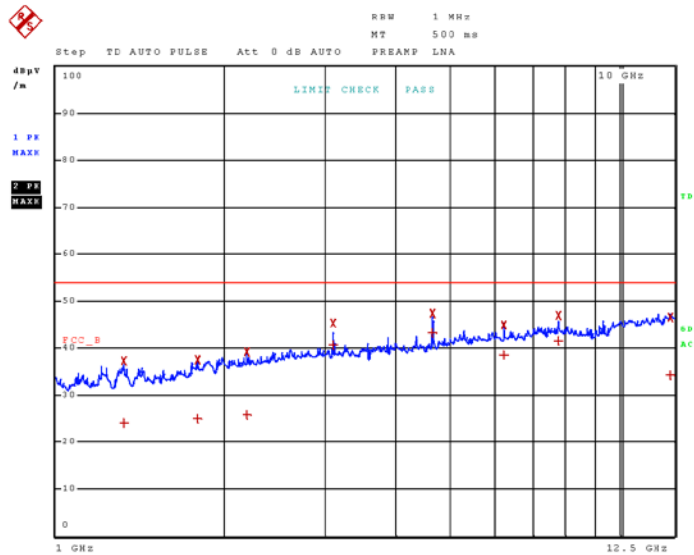
Test Data: Middle of Band 511.9125 MHz Field Strength Plot, Horiz. Polarity

15.May 18 09:19

Time Domain Scan (1 Range)

Scan Start: 1 GHz
 Scan Stop: 12.5 GHz
 Detector: Trace 1: MAX PEAK Trace 2: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
1.000000 GHz	12.500000 GHz	250.00 kHz	1.00 MHz	100 μ s	Auto	35 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: Middle of Band 511.9125 MHz Field Strength Table, Horiz. Polarity

15.May 18 09:19

Final Measurement

Meas Time: 500 ms
Margin: 40 dB
Subranges: 16

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.323250000 GHz	24.13	CISPR Averag	-29.87
2	1.323250000 GHz	37.30	Max Peak	
1	1.781250000 GHz	24.96	CISPR Averag	-29.04
2	1.781250000 GHz	37.43	Max Peak	
1	2.182000000 GHz	25.70	CISPR Averag	-28.30
2	2.182000000 GHz	39.09	Max Peak	
1	3.109750000 GHz	40.66	CISPR Averag	-13.34
2	3.109750000 GHz	45.23	Max Peak	
1	4.664750000 GHz	43.23	CISPR Averag	-10.77
2	4.664750000 GHz	47.42	Max Peak	
1	6.219500000 GHz	38.63	CISPR Averag	-15.37
2	6.219500000 GHz	44.91	Max Peak	
1	7.774500000 GHz	41.41	CISPR Averag	-12.59
2	7.774500000 GHz	46.98	Max Peak	
1	12.280750000 GHz	34.07	CISPR Averag	-19.93
2	12.280750000 GHz	46.53	Max Peak	

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

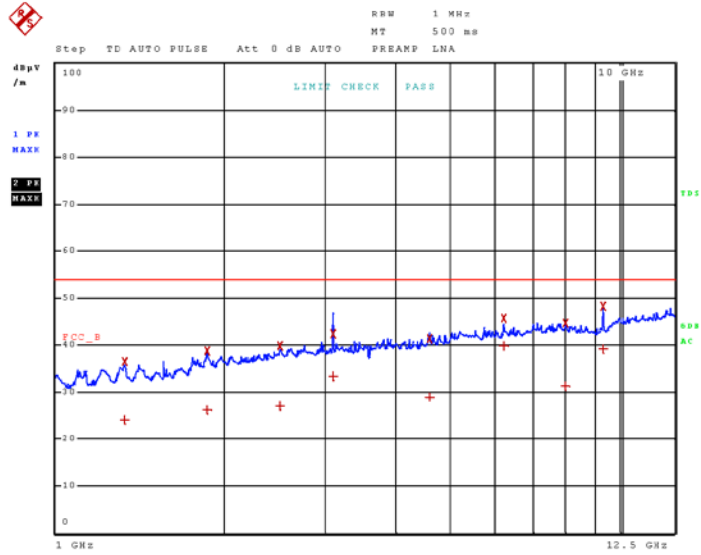
Test Data: Middle of Band 511.9125 MHz Field Strength Plot, Vert. Polarity

15.May 18 09:20

Time Domain Scan (1 Range)

Scan Start: 1 GHz
 Scan Stop: 12.5 GHz
 Detector: Trace 1: MAX PEAK Trace 2: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
1.000000 GHz	12.500000 GHz	250.00 kHz	1.00 MHz	100 μ s	Auto	35 dB	INPUT1



RADIATED SPURIOUS EMISSIONS

Test Data: Middle of Band 511.9125 MHz Field Strength Table, Vert. Polarity

15.May 18 09:20

Final Measurement

Meas Time: 500 ms
 Margin: 40 dB
 Subranges: 16

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.324750000 GHz	24.10	CISPR Averag	-29.90
2	1.324750000 GHz	36.46	Max Peak	
1	1.860250000 GHz	26.07	CISPR Averag	-27.93
2	1.860250000 GHz	38.74	Max Peak	
1	2.495000000 GHz	27.03	CISPR Averag	-26.97
2	2.495000000 GHz	39.72	Max Peak	
1	3.109750000 GHz	33.22	CISPR Averag	-20.78
2	3.109750000 GHz	42.24	Max Peak	
1	4.602000000 GHz	28.90	CISPR Averag	-25.10
2	4.602000000 GHz	41.22	Max Peak	
1	6.219750000 GHz	39.86	CISPR Averag	-14.14
2	6.219750000 GHz	45.65	Max Peak	
1	8.015500000 GHz	31.29	CISPR Averag	-22.71
2	8.015500000 GHz	44.56	Max Peak	
1	9.329500000 GHz	39.19	CISPR Averag	-14.81
2	9.329500000 GHz	48.26	Max Peak	

RADIATED SPURIOUS EMISSIONS

Tuned to 954.9125 MHz, Scanned 1 GHz to 12.5 GHz

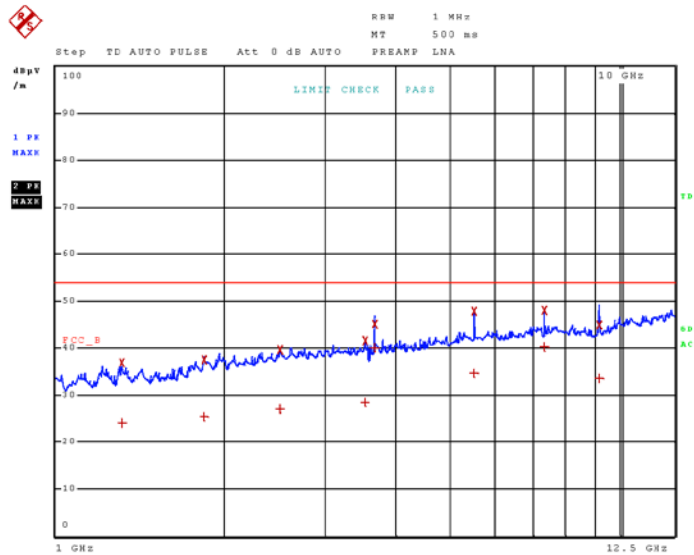
Test Data: High End of Band 954.9125 MHz Field Strength Plot, Horiz. Polarity

15.May 18 09:15

Time Domain Scan (1 Range)

Scan Start: 1 GHz
 Scan Stop: 12.5 GHz
 Detector: Trace 1: MAX PEAK Trace 2: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
1.000000 GHz	12.500000 GHz	250.00 kHz	1.00 MHz	100 μ s	Auto	35 dB	INPUT1





RADIATED SPURIOUS EMISSIONS

Test Data: High End of Band 954.9125 MHz Field Strength Table, Horiz. Polarity

15.May 18 09:15

Final Measurement

Meas Time: 500 ms
Margin: 40 dB
Subranges: 16

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.310750000 GHz	24.07	CISPR Averag	-29.93
2	1.310750000 GHz	36.83	Max Peak	
1	1.838500000 GHz	25.37	CISPR Averag	-28.63
2	1.838500000 GHz	37.58	Max Peak	
1	2.498500000 GHz	27.07	CISPR Averag	-26.93
2	2.498500000 GHz	39.57	Max Peak	
1	3.529500000 GHz	28.55	CISPR Averag	-25.45
2	3.529500000 GHz	41.41	Max Peak	
1	3.676750000 GHz	40.03	CISPR Averag	-13.97
2	3.676750000 GHz	45.03	Max Peak	
1	5.515000000 GHz	34.47	CISPR Averag	-19.53
2	5.515000000 GHz	47.73	Max Peak	
1	7.353500000 GHz	40.19	CISPR Averag	-13.81
2	7.353500000 GHz	48.04	Max Peak	
1	9.191750000 GHz	33.51	CISPR Averag	-20.49
2	9.191750000 GHz	44.90	Max Peak	

Page 2 of 2

RADIATED SPURIOUS EMISSIONS

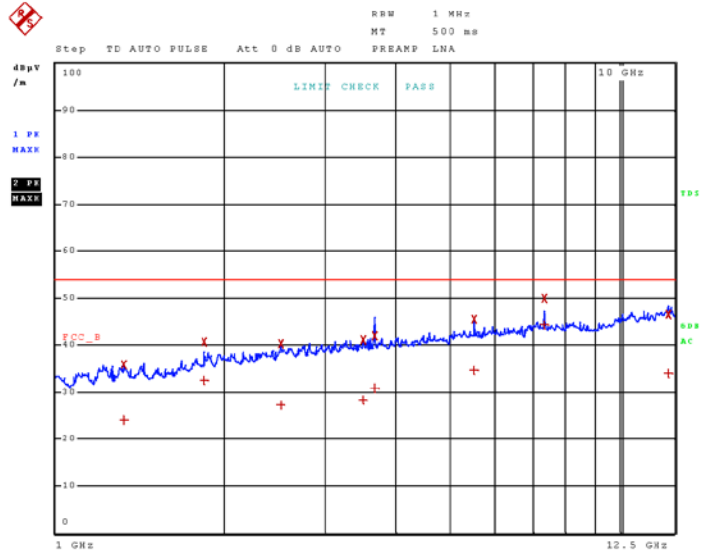
Test Data: High End of Band 954.9125 MHz Field Strength Plot, Vert. Polarity

15.May 18 09:13

Time Domain Scan (1 Range)

Scan Start: 1 GHz
 Scan Stop: 12.5 GHz
 Detector: Trace 1: MAX PEAK Trace 2: MAX PEAK
 Transducer: TDS_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
1.000000 GHz	12.500000 GHz	250.00 kHz	1.00 MHz	100 μs	Auto	35 dB	INPUT1



RADIATED SPURIOUS EMISSIONS

Test Data: High End of Band 954.9125 MHz Field Strength Table, Vert. Polarity

15.May 18 09:13

Final Measurement

Meas Time: 500 ms
 Margin: 40 dB
 Subranges: 16

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.321500000 GHz	24.09	CISPR Averag	-29.91
2	1.321500000 GHz	35.86	Max Peak	
1	1.838250000 GHz	32.43	CISPR Averag	-21.57
2	1.838250000 GHz	40.60	Max Peak	
1	2.508000000 GHz	27.26	CISPR Averag	-26.74
2	2.508000000 GHz	40.14	Max Peak	
1	3.509250000 GHz	28.31	CISPR Averag	-25.69
2	3.509250000 GHz	41.03	Max Peak	
1	3.676750000 GHz	30.84	CISPR Averag	-23.16
2	3.676750000 GHz	41.95	Max Peak	
1	5.515000000 GHz	34.61	CISPR Averag	-19.39
2	5.515000000 GHz	45.55	Max Peak	
1	7.353250000 GHz	44.23	CISPR Averag	-9.77
2	7.353250000 GHz	49.87	Max Peak	
1	12.223500000 GHz	33.94	CISPR Averag	-20.06
2	12.223500000 GHz	46.60	Max Peak	

RADIATED SPURIOUS EMISSIONS

ANTENNA CONDUCTED POWER

Rule Part No.: FCC Part 15 Subpart B

Requirements: FCC Part 15.111(a) Antenna power conduction limits for receivers
In addition to the radiated emission limits. Receivers that operate (tune) in the frequency range 30 to 960 MHz and CB receivers that provide terminals for the connection of an external receiving antenna may be tested to demonstrate compliance with the provisions of §15.109 with the antenna terminals shielded and terminated with a resistive termination equal to the impedance specified for the antenna. Provided these receivers also comply with the following: With the receiver antenna terminal connected to a resistive termination equal to the impedance specified or employed for the antenna, the power at the antenna terminal at any frequency within the range of measurements specified in §15.33 shall not exceed 2.0 nanowatts.

Procedure: FCC Part 15.33(b)(3) Frequency range of radiated measurements

FCC Part 15.35(a) Measurement detector functions and bandwidths

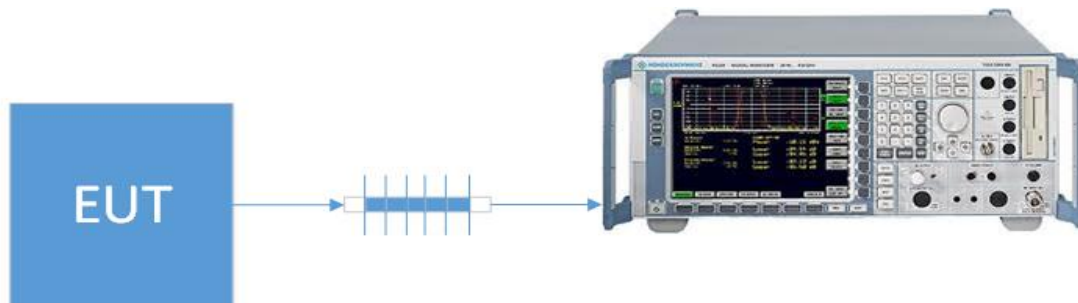
ANSI C63.4 Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment 9 kHz to 40 GHz

§ 12.2.2 Operating conditions

§ 12.2.6 Antenna-conducted power measurements

Configuration: The scanner receiver spurious emissions are to be measured when the receiver is in the scanning mode and repeated when the scanning is stopped.

Setup:



Results: N/A

POWER LINE CONDUCTED INTERFERENCE

Rules Part No.: Part 15.107

Requirements:

Frequency (MHz)	Quasi Peak Limits (dB μ V)	Average Limits (dB μ V)
0.15 – 0.5	66 – 56 *	56 – 46 *
0.5 – 5.0	56	46
5.0 – 30	60	50
* Decrease with logarithm of frequency		

Test Data: The following plots represent the emissions for power line conducted. Both lines were observed. 120 Volts AC 60 Hz supply voltage was used for all tests

POWER LINE CONDUCTED INTERFERENCE

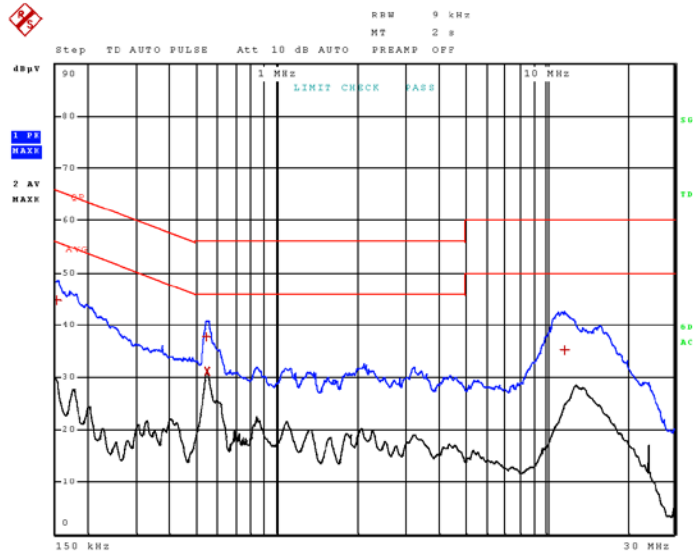
Test Data: Scanning, Line 1 Peak Plot

15.May 18 10:40

Time Domain Scan (1 Range)

Scan Start: 150 kHz
 Scan Stop: 30 MHz
 Detector: Trace 1: MAX PEAK Trace 2: Average
 Transducer: tdf_20

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
150.000000 kHz	30.000000 MHz	2.25 kHz	9.00 kHz	500 ms	Auto	0 dB	INPUT2



Final Measurement

Meas Time: 2 s
 Margin: 20 dB
 Subranges: 4

Trace	Frequency	Level (dBµV)	Detector	Delta Limit/dB
1	152.25000000 kHz	44.68	Quasi Peak	-21.19
1	543.75000000 kHz	37.81	Quasi Peak	-18.19
2	548.25000000 kHz	31.16	Average	-14.84
1	11.69475000 MHz	35.33	Quasi Peak	-24.67

Page 1 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
 FCC ID: AMWUB383
 Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)



POWER LINE CONDUCTED INTERFERENCE

Test Data: Scanning, Line 1 Peak Plot Table

15.May 18 10:40

Transducer Table

Name: tdf_20
Interpolation: LIN
Comment: ANS 25/2 Primary LISN IL Line 1 + Coax Cable IL

<u>Frequency</u>	<u>Factor (dB)</u>
150.00 kHz	0.19
170.00 kHz	0.17
200.00 kHz	0.16
250.00 kHz	0.13
300.00 kHz	0.12
350.00 kHz	0.12
400.00 kHz	0.11
500.00 kHz	0.12
600.00 kHz	0.12
700.00 kHz	0.11
800.00 kHz	0.13
900.00 kHz	0.12
1.00 MHz	0.21
1.20 MHz	0.22
1.50 MHz	0.26
2.00 MHz	0.37
2.50 MHz	0.41
3.00 MHz	0.59
4.00 MHz	0.40
5.00 MHz	0.47
7.00 MHz	0.63
10.00 MHz	0.88
15.00 MHz	1.08
20.00 MHz	1.01
30.00 MHz	1.80

Page 2 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
FCC ID: AMWUB383
Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)

Page 73 of 92

POWER LINE CONDUCTED INTERFERENCE

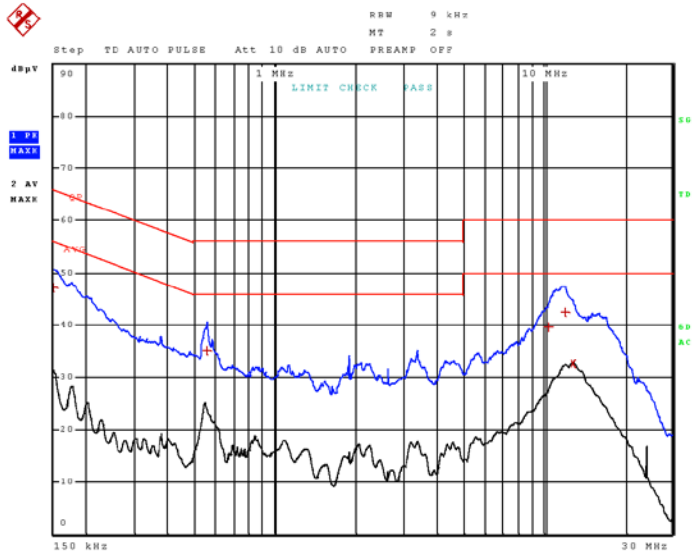
Test Data: Scanning, Line 2 Peak Plot

15.May 18 10:37

Time Domain Scan (1 Range)

Scan Start: 150 kHz
 Scan Stop: 30 MHz
 Detector: Trace 1: MAX PEAK Trace 2: Average
 Transducer: tdf_20

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
150.000000 kHz	30.000000 MHz	2.25 kHz	9.00 kHz	500 ms	Auto	0 dB	INPUT2



Final Measurement

Meas Time: 2 s
 Margin: 20 dB
 Subranges: 5

Trace	Frequency	Level (dBµV)	Detector	Delta Limit/dB
1	150.000000000 kHz	47.24	Quasi Peak	-18.76
1	557.250000000 kHz	35.08	Quasi Peak	-20.92
1	10.385250000 MHz	39.56	Quasi Peak	-20.44
1	12.016500000 MHz	42.48	Quasi Peak	-17.52
2	12.828750000 MHz	32.63	Average	-17.37

Page 1 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
 FCC ID: AMWUB383
 Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)



POWER LINE CONDUCTED INTERFERENCE

Test Data: Scanning, Line 2 Peak Plot Table

15.May 18 10:37

Transducer Table

Name: tdf_20
Interpolation: LIN
Comment: ANS 25/2 Primary LISN IL Line 1 + Coax Cable IL

<u>Frequency</u>	<u>Factor (dB)</u>
150.00 kHz	0.19
170.00 kHz	0.17
200.00 kHz	0.16
250.00 kHz	0.13
300.00 kHz	0.12
350.00 kHz	0.12
400.00 kHz	0.11
500.00 kHz	0.12
600.00 kHz	0.12
700.00 kHz	0.11
800.00 kHz	0.13
900.00 kHz	0.12
1.00 MHz	0.21
1.20 MHz	0.22
1.50 MHz	0.26
2.00 MHz	0.37
2.50 MHz	0.41
3.00 MHz	0.59
4.00 MHz	0.40
5.00 MHz	0.47
7.00 MHz	0.63
10.00 MHz	0.88
15.00 MHz	1.08
20.00 MHz	1.01
30.00 MHz	1.80

Page 2 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
FCC ID: AMWUB383
Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)

Page 75 of 92

POWER LINE CONDUCTED INTERFERENCE

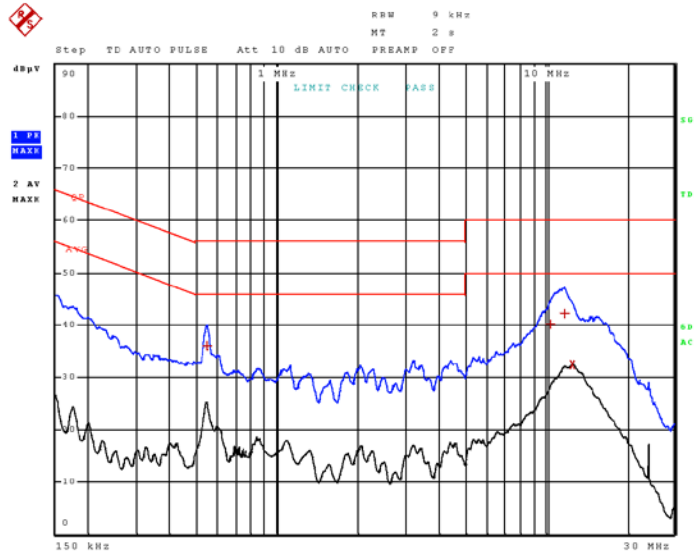
Test Data: Tuned to 40.84 MHz, Line 1 Peak Plot

15.May 18 10:46

Time Domain Scan (1 Range)

Scan Start: 150 kHz
 Scan Stop: 30 MHz
 Detector: Trace 1: MAX PEAK Trace 2: Average
 Transducer: tdf_20

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
150.000000 kHz	30.000000 MHz	2.25 kHz	9.00 kHz	500 ms	Auto	0 dB	INPUT2



Final Measurement

Meas Time: 2 s
 Margin: 20 dB
 Subranges: 4

Trace	Frequency	Level (dBµV)	Detector	Delta Limit/dB
1	548.25000000 kHz	36.01	Quasi Peak	-19.99
1	10.347000000 MHz	40.16	Quasi Peak	-19.84
1	11.703750000 MHz	42.26	Quasi Peak	-17.74
2	12.540750000 MHz	32.47	Average	-17.53

Page 1 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
 FCC ID: AMWUB383
 Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)



POWER LINE CONDUCTED INTERFERENCE

Test Data: Tuned to 40.84 MHz, Line 1 Peak Plot Table

15.May 18 10:46

Transducer Table

Name: tdf_20
Interpolation: LIN
Comment: ANS 25/2 Primary LISN IL Line 1 + Coax Cable IL

<u>Frequency</u>	<u>Factor (dB)</u>
150.00 kHz	0.19
170.00 kHz	0.17
200.00 kHz	0.16
250.00 kHz	0.13
300.00 kHz	0.12
350.00 kHz	0.12
400.00 kHz	0.11
500.00 kHz	0.12
600.00 kHz	0.12
700.00 kHz	0.11
800.00 kHz	0.13
900.00 kHz	0.12
1.00 MHz	0.21
1.20 MHz	0.22
1.50 MHz	0.26
2.00 MHz	0.37
2.50 MHz	0.41
3.00 MHz	0.59
4.00 MHz	0.40
5.00 MHz	0.47
7.00 MHz	0.63
10.00 MHz	0.88
15.00 MHz	1.08
20.00 MHz	1.01
30.00 MHz	1.80

Page 2 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
FCC ID: AMWUB383
Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)

Page 77 of 92

POWER LINE CONDUCTED INTERFERENCE

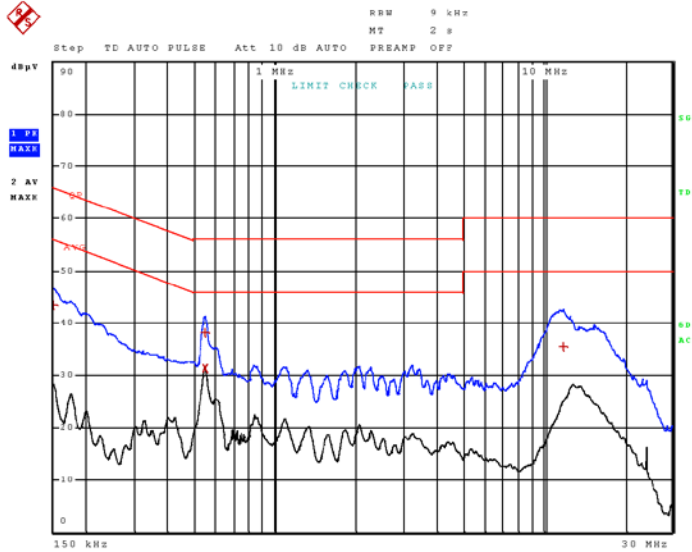
Test Data: Tuned to 40.84 MHz, Line 2 Peak Plot

15.May 18 10:44

Time Domain Scan (1 Range)

Scan Start: 150 kHz
 Scan Stop: 30 MHz
 Detector: Trace 1: MAX PEAK Trace 2: Average
 Transducer: tdf_20

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
150.000000 kHz	30.000000 MHz	2.25 kHz	9.00 kHz	500 ms	Auto	0 dB	INPUT2



Final Measurement

Meas Time: 2 s
 Margin: 20 dB
 Subranges: 4

Trace	Frequency	Level (dBµV)	Detector	Delta Limit/dB
1	150.000000000 kHz	43.33	Quasi Peak	-22.67
1	546.000000000 kHz	38.06	Quasi Peak	-17.94
2	546.000000000 kHz	31.30	Average	-14.70
1	11.773500000 MHz	35.51	Quasi Peak	-24.49

Page 1 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
 FCC ID: AMWUB383
 Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)



POWER LINE CONDUCTED INTERFERENCE

Test Data: Tuned to 40.84 MHz, Line 2 Peak Plot Table

15.May 18 10:44

Transducer Table

Name: tdf_20
Interpolation: LIN
Comment: ANS 25/2 Primary LISN IL Line 1 + Coax Cable IL

<u>Frequency</u>	<u>Factor (dB)</u>
150.00 kHz	0.19
170.00 kHz	0.17
200.00 kHz	0.16
250.00 kHz	0.13
300.00 kHz	0.12
350.00 kHz	0.12
400.00 kHz	0.11
500.00 kHz	0.12
600.00 kHz	0.12
700.00 kHz	0.11
800.00 kHz	0.13
900.00 kHz	0.12
1.00 MHz	0.21
1.20 MHz	0.22
1.50 MHz	0.26
2.00 MHz	0.37
2.50 MHz	0.41
3.00 MHz	0.59
4.00 MHz	0.40
5.00 MHz	0.47
7.00 MHz	0.63
10.00 MHz	0.88
15.00 MHz	1.08
20.00 MHz	1.01
30.00 MHz	1.80

Page 2 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
FCC ID: AMWUB383
Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)

Page 79 of 92

POWER LINE CONDUCTED INTERFERENCE

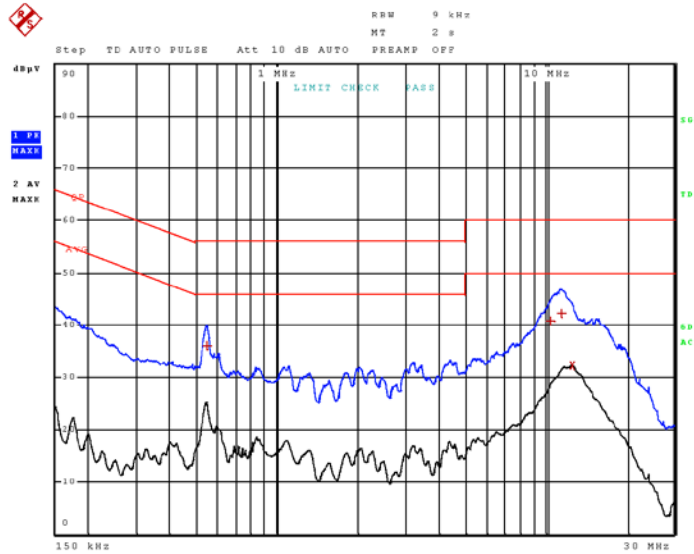
Test Data: Tuned to 107.1 MHz, Line 1 Peak Plot

15.May 18 11:09

Time Domain Scan (1 Range)

Scan Start: 150 kHz
 Scan Stop: 30 MHz
 Detector: Trace 1: MAX PEAK Trace 2: Average
 Transducer: tdf_21

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
150.000000 kHz	30.000000 MHz	2.25 kHz	9.00 kHz	500 ms	Auto	0 dB	INPUT2



Final Measurement

Meas Time: 2 s
 Margin: 20 dB
 Subranges: 4

Trace	Frequency	Level (dBµV)	Detector	Delta Limit/dB
1	546.000000000 kHz	36.02	Quasi Peak	-19.98
1	10.392000000 MHz	40.70	Quasi Peak	-19.30
1	11.368500000 MHz	42.26	Quasi Peak	-17.74
2	12.538500000 MHz	32.30	Average	-17.70

Page 1 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
 FCC ID: AMWUB383
 Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)



POWER LINE CONDUCTED INTERFERENCE

Test Data: Tuned to 107.1 MHz, Line 1 Peak Plot Table

15.May.18 11:09

Transducer Table

Name: tdf_21
Interpolation: LIN
Comment: ANS 25/2 Primary LISN IL Line 2 + Coax Cable IL

<u>Frequency</u>	<u>Factor (dB)</u>
150.00 kHz	0.28
170.00 kHz	0.25
200.00 kHz	0.22
250.00 kHz	0.19
300.00 kHz	0.15
350.00 kHz	0.16
400.00 kHz	0.17
500.00 kHz	0.16
600.00 kHz	0.15
700.00 kHz	0.16
800.00 kHz	0.17
900.00 kHz	0.15
1.00 MHz	0.23
1.20 MHz	0.28
1.50 MHz	0.34
2.00 MHz	0.40
2.50 MHz	0.44
3.00 MHz	0.65
4.00 MHz	0.47
5.00 MHz	0.48
7.00 MHz	0.68
10.00 MHz	0.92
15.00 MHz	1.10
20.00 MHz	0.92
30.00 MHz	1.82

Page 2 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
FCC ID: AMWUB383
Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)

Page 81 of 92

POWER LINE CONDUCTED INTERFERENCE

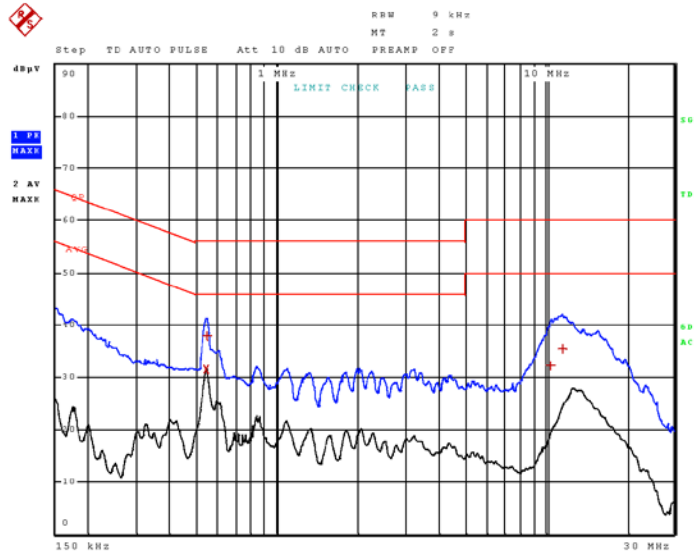
Test Data: Tuned to 107.1 MHz, Line 2 Peak Plot

15.May 18 11:11

Time Domain Scan (1 Range)

Scan Start: 150 kHz
 Scan Stop: 30 MHz
 Detector: Trace 1: MAX PEAK Trace 2: Average
 Transducer: tdf_21

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
150.000000 kHz	30.000000 MHz	2.25 kHz	9.00 kHz	500 ms	Auto	0 dB	INPUT2



Final Measurement

Meas Time: 2 s
 Margin: 20 dB
 Subranges: 4

Trace	Frequency	Level (dBµV)	Detector	Delta Limit/dB
2	543.750000000 kHz	31.44	Average	-14.56
1	546.000000000 kHz	37.92	Quasi Peak	-18.08
1	10.383000000 MHz	32.28	Quasi Peak	-27.72
1	11.478750000 MHz	35.40	Quasi Peak	-24.60

Page 1 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
 FCC ID: AMWUB383
 Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)



POWER LINE CONDUCTED INTERFERENCE

Test Data: Tuned to 107.1 MHz, Line 2 Peak Plot Table

15.May 18 11:11

Transducer Table

Name: tdf_21
Interpolation: LIN
Comment: ANS 25/2 Primary LISN IL Line 2 + Coax Cable IL

<u>Frequency</u>	<u>Factor (dB)</u>
150.00 kHz	0.28
170.00 kHz	0.25
200.00 kHz	0.22
250.00 kHz	0.19
300.00 kHz	0.15
350.00 kHz	0.16
400.00 kHz	0.17
500.00 kHz	0.16
600.00 kHz	0.15
700.00 kHz	0.16
800.00 kHz	0.17
900.00 kHz	0.15
1.00 MHz	0.23
1.20 MHz	0.28
1.50 MHz	0.34
2.00 MHz	0.40
2.50 MHz	0.44
3.00 MHz	0.65
4.00 MHz	0.47
5.00 MHz	0.40
7.00 MHz	0.68
10.00 MHz	0.92
15.00 MHz	1.10
20.00 MHz	0.92
30.00 MHz	1.82

Page 2 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
FCC ID: AMWUB383
Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)

Page 83 of 92

POWER LINE CONDUCTED INTERFERENCE

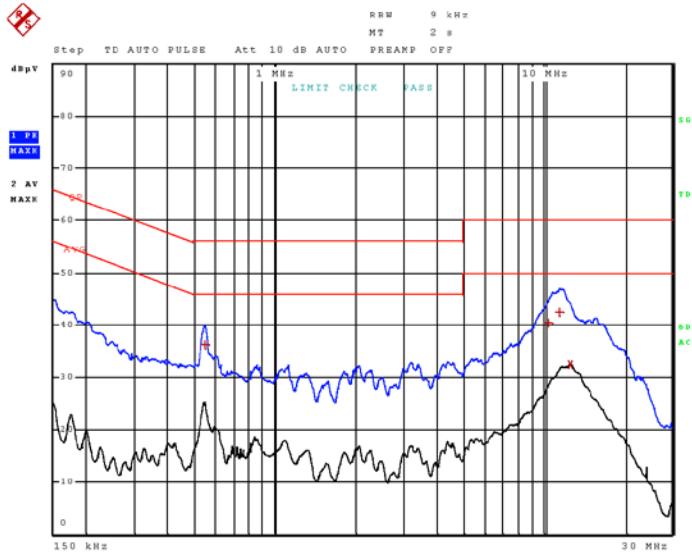
Test Data: Tuned to 511.9125 MHz, Line 1 Peak Plot

15.May 18 10:54

Time Domain Scan (1 Range)

Scan Start: 150 kHz
 Scan Stop: 30 MHz
 Detector: Trace 1: MAX PEAK Trace 2: Average
 Transducer: tdf_20

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
150.000000 kHz	30.000000 MHz	2.25 kHz	9.00 kHz	500 ms	Auto	0 dB	INPUT2



Final Measurement

Meas Time: 2 s
 Margin: 20 dB
 Subranges: 4

Trace	Frequency	Level (dBµV)	Detector	Delta Limit/dB
1	546.000000000 kHz	36.17	Quasi Peak	-19.83
1	10.383000000 MHz	40.33	Quasi Peak	-19.67
1	11.388750000 MHz	42.39	Quasi Peak	-17.61
2	12.543000000 MHz	32.39	Average	-17.61

Page 1 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
 FCC ID: AMWUB383
 Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)



POWER LINE CONDUCTED INTERFERENCE

Test Data: Tuned to 511.9125 MHz, Line 1 Peak Plot Table

15.May 18 10:54

Transducer Table

Name: tdf_20
Interpolation: LIN
Comment: ANS 25/2 Primary LISN IL Line 1 + Coax Cable IL

<u>Frequency</u>	<u>Factor (dB)</u>
150.00 kHz	0.19
170.00 kHz	0.17
200.00 kHz	0.16
250.00 kHz	0.13
300.00 kHz	0.12
350.00 kHz	0.12
400.00 kHz	0.11
500.00 kHz	0.12
600.00 kHz	0.12
700.00 kHz	0.11
800.00 kHz	0.13
900.00 kHz	0.12
1.00 MHz	0.21
1.20 MHz	0.22
1.50 MHz	0.26
2.00 MHz	0.37
2.50 MHz	0.41
3.00 MHz	0.59
4.00 MHz	0.40
5.00 MHz	0.47
7.00 MHz	0.63
10.00 MHz	0.88
15.00 MHz	1.08
20.00 MHz	1.01
30.00 MHz	1.80

Page 2 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
FCC ID: AMWUB383
Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)

Page 85 of 92

POWER LINE CONDUCTED INTERFERENCE

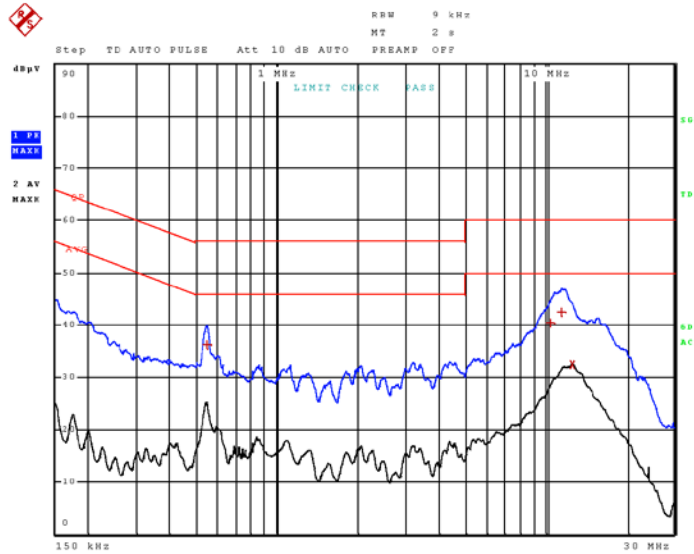
Test Data: Tuned to 511.9125 MHz, Line 2 Peak Plot

15.May 18 10:54

Time Domain Scan (1 Range)

Scan Start: 150 kHz
 Scan Stop: 30 MHz
 Detector: Trace 1: MAX PEAK Trace 2: Average
 Transducer: tdf_20

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
150.000000 kHz	30.000000 MHz	2.25 kHz	9.00 kHz	500 ms	Auto	0 dB	INPUT2



Final Measurement

Meas Time: 2 s
 Margin: 20 dB
 Subranges: 4

Trace	Frequency	Level (dBµV)	Detector	Delta Limit/dB
1	546.000000000 kHz	36.17	Quasi Peak	-19.83
1	10.383000000 MHz	40.33	Quasi Peak	-19.67
1	11.388750000 MHz	42.39	Quasi Peak	-17.61
2	12.543000000 MHz	32.39	Average	-17.61

Page 1 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
 FCC ID: AMWUB383
 Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)



POWER LINE CONDUCTED INTERFERENCE

Test Data: Tuned to 511.9125 MHz, Line 2 Peak Plot Table

15.May 18 10:54

Transducer Table

Name: tdf_20
Interpolation: LIN
Comment: ANS 25/2 Primary LISN IL Line 1 + Coax Cable IL

<u>Frequency</u>	<u>Factor (dB)</u>
150.00 kHz	0.19
170.00 kHz	0.17
200.00 kHz	0.16
250.00 kHz	0.13
300.00 kHz	0.12
350.00 kHz	0.12
400.00 kHz	0.11
500.00 kHz	0.12
600.00 kHz	0.12
700.00 kHz	0.11
800.00 kHz	0.13
900.00 kHz	0.12
1.00 MHz	0.21
1.20 MHz	0.22
1.50 MHz	0.26
2.00 MHz	0.37
2.50 MHz	0.41
3.00 MHz	0.59
4.00 MHz	0.40
5.00 MHz	0.47
7.00 MHz	0.63
10.00 MHz	0.88
15.00 MHz	1.08
20.00 MHz	1.01
30.00 MHz	1.80

Page 2 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
FCC ID: AMWUB383
Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)

Page 87 of 92

POWER LINE CONDUCTED INTERFERENCE

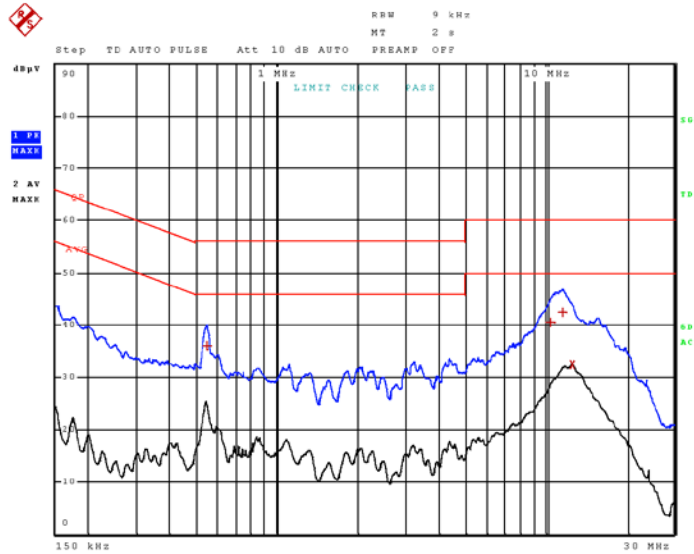
Test Data: Tuned to 954.9125 MHz, Line 1 Peak Plot

15.May 18 11:07

Time Domain Scan (1 Range)

Scan Start: 150 kHz
 Scan Stop: 30 MHz
 Detector: Trace 1: MAX PEAK Trace 2: Average
 Transducer: tdf_21

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
150.000000 kHz	30.000000 MHz	2.25 kHz	9.00 kHz	500 ms	Auto	0 dB	INPUT2



Final Measurement

Meas Time: 2 s
 Margin: 20 dB
 Subranges: 4

Trace	Frequency	Level (dBµV)	Detector	Delta Limit/dB
1	546.000000000 kHz	36.10	Quasi Peak	-19.90
1	10.376250000 MHz	40.47	Quasi Peak	-19.53
1	11.521500000 MHz	42.38	Quasi Peak	-17.62
2	12.473250000 MHz	32.34	Average	-17.66

Page 1 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
 FCC ID: AMWUB383
 Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)



POWER LINE CONDUCTED INTERFERENCE

Test Data: Tuned to 954.9125 MHz, Line 1 Peak Plot Table

15.May 18 11:07

Transducer Table

Name: tdf_21
Interpolation: LIN
Comment: ANS 25/2 Primary LISN IL Line 2 + Coax Cable IL

<u>Frequency</u>	<u>Factor (dB)</u>
150.00 kHz	0.28
170.00 kHz	0.25
200.00 kHz	0.22
250.00 kHz	0.19
300.00 kHz	0.15
350.00 kHz	0.16
400.00 kHz	0.17
500.00 kHz	0.16
600.00 kHz	0.15
700.00 kHz	0.16
800.00 kHz	0.17
900.00 kHz	0.15
1.00 MHz	0.23
1.20 MHz	0.28
1.50 MHz	0.34
2.00 MHz	0.40
2.50 MHz	0.44
3.00 MHz	0.65
4.00 MHz	0.47
5.00 MHz	0.40
7.00 MHz	0.68
10.00 MHz	0.92
15.00 MHz	1.10
20.00 MHz	0.92
30.00 MHz	1.82

Page 2 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
FCC ID: AMWUB383
Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)

Page 89 of 92

POWER LINE CONDUCTED INTERFERENCE

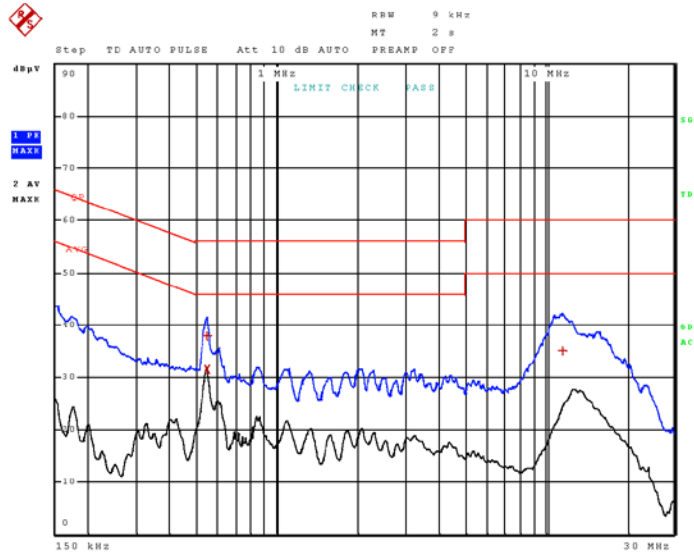
Test Data: Tuned to 954.9125 MHz, Line 2 Peak Plot

15.May 18 11:04

Time Domain Scan (1 Range)

Scan Start: 150 kHz
 Scan Stop: 30 MHz
 Detector: Trace 1: MAX PEAK Trace 2: Average
 Transducer: tdf_21

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
150.000000 kHz	30.000000 MHz	2.25 kHz	9.00 kHz	500 ms	Auto	0 dB	INPUT2



Final Measurement

Meas Time: 2 s
 Margin: 20 dB
 Subranges: 3

Trace	Frequency	Level (dBµV)	Detector	Delta Limit/dB
1	546.000000000 kHz	37.93	Quasi Peak	-18.07
2	546.000000000 kHz	31.43	Average	-14.57
1	11.456250000 MHz	35.13	Quasi Peak	-24.87

Page 1 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
 FCC ID: AMWUB383
 Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)

Page 90 of 92



POWER LINE CONDUCTED INTERFERENCE

Test Data: Tuned to 954.9125 MHz, Line 2 Peak Plot Table

15.May 18 11:04

Transducer Table

Name: tdf_21
Interpolation: LIN
Comment: ANS 25/2 Primary LISN IL Line 2 + Coax Cable IL

<u>Frequency</u>	<u>Factor (dB)</u>
150.00 kHz	0.28
170.00 kHz	0.25
200.00 kHz	0.22
250.00 kHz	0.19
300.00 kHz	0.15
350.00 kHz	0.16
400.00 kHz	0.17
500.00 kHz	0.16
600.00 kHz	0.15
700.00 kHz	0.16
800.00 kHz	0.17
900.00 kHz	0.15
1.00 MHz	0.23
1.20 MHz	0.28
1.50 MHz	0.34
2.00 MHz	0.40
2.50 MHz	0.44
3.00 MHz	0.65
4.00 MHz	0.47
5.00 MHz	0.48
7.00 MHz	0.68
10.00 MHz	0.92
15.00 MHz	1.10
20.00 MHz	0.92
30.00 MHz	1.82

Page 2 of 2

Results Meets Requirements

Applicant: UNIDEN AMERICA CORPORATION
FCC ID: AMWUB383
Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)

Page 91 of 92

TEST EQUIPMENT LIST

Device	Manufacturer	Model	Serial Number	Cal/Char Date	Due Date
Antenna: Biconical 1096	Eaton	94455-1	1096	08/01/17	08/01/19
Antenna: Log-Periodic 1122	Electro- Metrics	LPA-25	1122	07/26/17	07/26/19
LISN (Primary)	Electro- Metrics	ANS-25/2	225363	08/26/17	08/26/19
LISN (Secondary)	Electro- Metrics	EM-7820	2682	N/A	N/A
CHAMBER	Panashield	3M	N/A	12/31/17	12/31/19
Antenna: Double- Ridged Horn/ETS Horn 2	ETS-Lindgren	3117	00041534	03/01/17	03/01/19
EMI Test Receiver R & S ESIB 40 Screen Room	Rohde & Schwarz	ESIB 40	100274	08/16/16	08/16/18
Software: Field Strength Program	Timco	N/A	Version 4.10.7.0	N/A	N/A
EMI Test Receiver R & S ESU 40 Chamber	Rohde & Schwarz	ESU 40	100320	04/01/16	04/01/19
Coaxial Cable - BMBM- 1000-00 Silver	Semflex	LISN Cable	BMBM-1000- 00	01/05/17	01/05/19
Coaxial Cable - Chamber 3 cable set (Primary)	Micro-Coax	Chamber 3 cable set (Primary)	KMKM-0244- 01; KMKM- 0670-00; KFKF-0198- 01	08/09/16	08/09/18
Bore-sight Antenna Positioning Tower	Sunol Sciences	TLT2	N/A	N/A	N/A
Pre-amp	RF-LAMBDA	RLNA00M45GA	N/A	01/04/16	01/04/19

*EMI RECEIVER SOFTWARE VERSION

The receiver firmware used was version 4.43 Service Pack 3

END OF TEST REPORT

Applicant: UNIDEN AMERICA CORPORATION
 FCC ID: AMWUB383
 Report: 192AUT18TestReport_Rev2

[TABLE OF CONTENTS](#)