Timco Test Report # TR_4955-20_FCC_15B_Scanning Reciever_2
Revision: 2
Issue Date: 12/21/2020
Final Test Date: 12/21/2020

ACCREDITED
CERT #0955.01

TIMCO ENGINEERING, Inc.

An IIA Company

Test Report – FCC 15B Unintentional Radiator
Prepared For: Uniden America Corporation

Approved for Release By:

Signature: Bruno Clavier

Name & Title: Bruno Clavier, General Manager

Date of Signature 12/21/2020

Table of Contents

1. Customer Information

Applicant: Uniden America Corporation
Address: 6225 N State Highway 161
Suite 300
Irving, TX 75038

Contact: Steve Roby
Telephone: 817-858-8624
Email address: SRoby@uniden.com

1.1 Test Result Summary

The following test procedure was used ANSI C63.4-2014. Full test results are available in this report.

No additions to the test methods were needed. There were no deviations, or exclusions from the test methods. No test results are from external providers or from the customer. The test results relate only to the items tested. Timco does not offer opinions and interpretations, only a pass/fail statement.

Clauses	Description of the Requirements	Result (Pass, Fail or N/A)
Applicable Clauses from FCC 15 B		
15.107	Conducted Emission Limits	NA(1)
15.111 (a)	Receiver Conducted Power	NA(1)
15.121	38 dB Rejection	NA(2)
15.109	Radiated Emission Limits	Pass

Notes:

1) EUT is not intended for connection with AC Mains.
2) Manufacturer provided attestation letter, no test required.

2. Location of Testing

2.1 Test Laboratory

Timco Engineering Inc. is a subsidiary of Industrial Inspection & Analysis, Inc. ("IIA"). Testing was performed at Timco's permanent laboratory located at 849 NW State Road 45, Newberry, Florida 32669

FCC test firm # 578780
FCC Designation # US1070
FCC site registration is under A2LA certificate # 0955.01
ISED Canada test site registration # 2056A
EU Notified Body # 1177
For all designations see A2LA scope # 0955.01

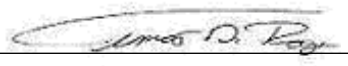
2.2 Testing was performed, reviewed by

Dates of Testing: 12/21/2020 – 12/21/2020

Signature: 

Name & Title: Franklin Rose, EMC Specialist

Date of Signature 12/21/2020

Signature:  

Name & Title: Tim Royer, EMC Engineer

Date of Signature 12/21/2020

3. Test Sample(s) (EUT/DUT)

The test sample was received: 12/21/2020

3.1 Description of the EUT

A description as well as unambiguous identification of the EUT(s) tested. Where more than one sample is required for technical reasons (such as the use of connected units for the purpose of conducted output power testing where the product units will have integral antennas), each specific test shall identify which unit was tested.

Identification	
FCC ID:	AMWUB376
Brief Description	Digital Scanning Receiver
Type of Modular	N/A
Model(s) #	BCD436HP
Firmware version	N/A
Software version	N/A
Serial Number	N/A

Technical Characteristics	
Technology	Digital Scanning Receiver
Frequency Range	25 – 1300 MHz
RF O/P Power (Max.)	N/A
Modulation	N/A
Bandwidth & Emission Class	N/A
Number of Channels	N/A
Duty Cycle	N/A
Antenna Connector	N/A
Voltage Rating (AC or Batt.)	Batt

Antenna Characteristics			
Antenna	Frequency Range	Mode / BW	Antenna Gain
1	n/a	n/a	0 dBi
2			

3.2 Configuration of EUT

Band	Mode	Number of Ant.
	Receive	1

Operating conditions during Testing:

No modifications of the device under test (including firmware, specific software settings, and input/output signal levels to the EUT).

Peripherals used during Testing:

No peripherals used.

3.3 Test Setup of EUT

Equipment, antenna, and cable arrangement. The setup of the equipment and cable or wire placement on the test site that produces the highest radiated and the highest ac power-line conducted emissions shall be shown clearly and described. Information on the orientation of portable equipment during testing shall be included. Drawings or photographs may be used for this purpose.

Test Setups are included in the test report.

4. Test methods & Applicable Regulatory Limits

4.1 Test methods/Standards/Guidance

The measurement was performed as per FCC 15B. Full test results are available in this report.

Limits and Regulatory Limits:

1) FCC 15B

5. Measurement Uncertainty

Parameter	Uncertainty (dB)
Conducted Emissions	1.42
Radiated Emissions (30 – 200 MHz)	5.49
Radiated Emissions (200 – 1000 MHz)	5.79
Radiated Emissions (1 GHz – 18 GHz)	4.37
The uncertainties provided in this table represent an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of K=2.	

6. Environmental Conditions

Temperature & Humidity

Measurements performed at the test site did not exceed the following:

Parameter	Measurement
Temperature	23 C +/- 5%
Humidity	55% +/- 5%
Barometric Pressure	30.05 in Hg

Note: Specific environmental conditions that are applicable to a specific test are available in the test result section.

7. List of Test Equipment and Test Facility

The test equipment used identified by type, manufacturer, serial number, or other identification and the date on which the next calibration or service check is due.

Description of the firmware or software used to operate EUT for testing purposes.

A complete list of all test equipment used shall be included with the test report. The manufacturer's model and serial numbers, and date of last calibration, and calibration interval shall be included. Measurement cable loss, measuring instrument bandwidth and detector function, video bandwidth, if appropriate, and antenna factors shall also be included where applicable.

List of Test Equipment

Device	Manufacturer	Model	SN #	Current Cal	Cal Due
Active Loop	ETS-Lindgren	6502	00062529	10/20/20	10/20/2023
Biconical 1057	Eaton	94455-1	1057	10/16/20	10/16/2023
Log-Periodic 1243	Eaton	96005	1243	4/20/18	4/19/2021
Double-Ridged Horn/ETS Horn 1	ETS-Lindgren	3117	00035923	2/25/20	2/24/2023
Double-Ridged Horn/ETS Horn 2	ETS-Lindgren	3117	00041534	10/14/20	10/14/2023
Double-Ridged Horn 18-40 GHz	EMCO	3116	9011-2145	10/19/20	10/19/2023
CHAMBER	Panashield	3M	N/A	3/12/19	3/11/2021
Pre-amp	RF-LAMBDA	RLNA00M45GA	NA	2/27/19	2/26/2022
EMI Test Receiver R&S ESU 40	Rohde & Schwarz	ESU 40	100320	8/28/18	8/27/2021
LISN (Primary)	Electro-Metrics	ANS-25/2	225363	9/16/20	9/16/2023

8. Test Results

The results of the test are usually indicated in the form of tables, spectrum analyzer plots, charts, sample calculations, as appropriate for each test procedure.

A description and/or a block diagram of the test setup is usually provided.

The measurement results, along with the appropriate limits for comparison, may be presented in tabular or graphical form. In addition, any variation in the measurement environment may be reported if applicable (e.g., a significant change of temperature that could affect the cable loss and amplifier response).

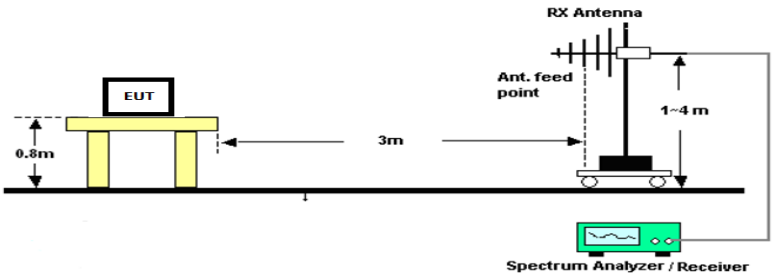
Units of measurement

Unless noted otherwise in the referenced standard, the measurements of ac power-line conducted emissions and conducted power output will be reported in units of dBµV. Unless noted otherwise in the referenced standard, the measurements of radiated emissions will be reported in units of decibels, referenced to one microvolt per meter (dBµV/m) for electric fields, or to one ampere per meter (dBA/m) for magnetic fields, at the distance specified in the appropriate standards or requirements. The measurements of antenna-conducted power for receivers may be reported in units of dBµV if the impedance of the measuring instrument is also reported. Otherwise, antenna-conducted power will be reported in units of decibels referenced to one milliwatt (dBm). All formulas for data conversions and conversion factors, if used, will be included in this measurement report.

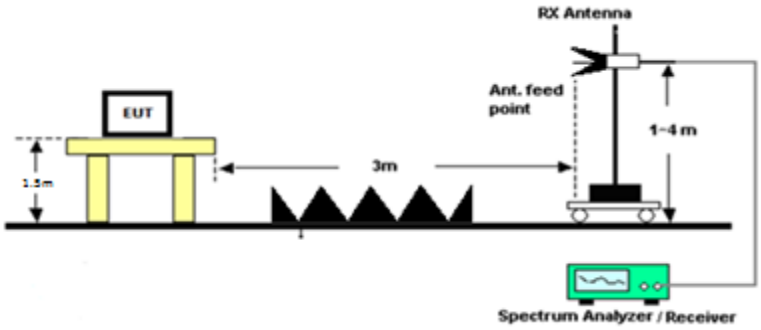
8.1 Radiated Emissions

Limits from FCC 15.109 and test procedure from ANSI C63.4-2014.

Radiated Test Setup, 30 – 1000 MHz



Radiated Test Setup, Above 1000 MHz



8.1.1 Scanning Receiver Function, 30 MHz to 200 MHz, Horizontal Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:18

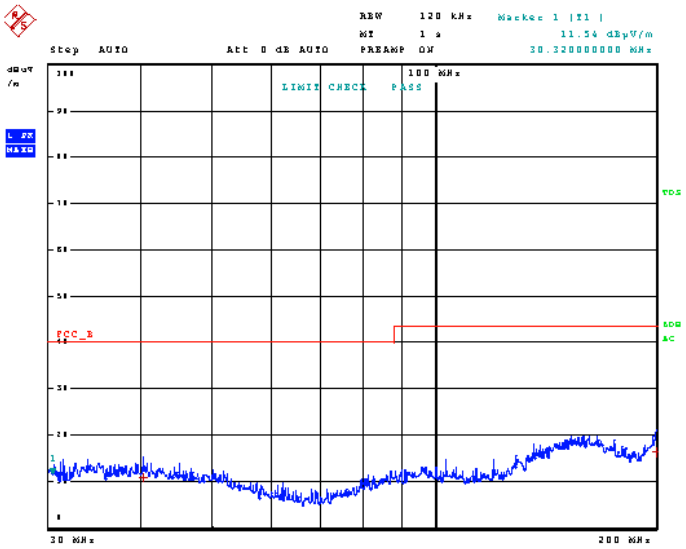
Test Spec CISPR 22 Radiated Disturbances

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 µs	Auto	20 dB	INPUT1



Page 1 of 2

8.1.2 Scanning Receiver Function, 30 MHz to 200 MHz, Horizontal Polarity Table

30.Dec 20 10:18

Test Spec CISPR 22 Radiated Disturbances

Polarity
Vertical

Final Measurement

Meas Time: 1 s
Margin: 25 dB
Subranges: 2

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	40.200000000 MHz	10.76	Quasi Peak	-29.24
1	199.760000000 MHz	16.26	Quasi Peak	-27.24

Page 2 of 2

8.1.3 Scanning Receiver Function, 30 MHz to 200 MHz, Vertical Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:18

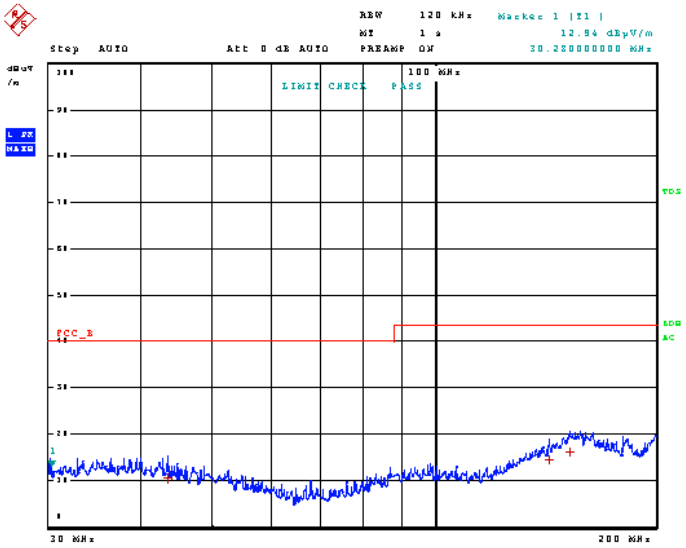
Test Spec CISPR 22 Radiated Disturbances

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 µs	Auto	20 dB	INPUT1



Page 1 of 2

8.1.4 Scanning Receiver Function, 30 MHz to 200 MHz, Vertical Polarity Table

30.Dec 20 10:18

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	43.400000000 MHz	10.32	Quasi Peak	-29.68
1	143.080000000 MHz	14.32	Quasi Peak	-29.18
1	152.480000000 MHz	15.99	Quasi Peak	-27.51

Page 2 of 2

8.1.5 Scanning Receiver Function, 200 MHz to 1000 MHz, Horizontal Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:16

Test Spec CISPR 22 Radiated Disturbances

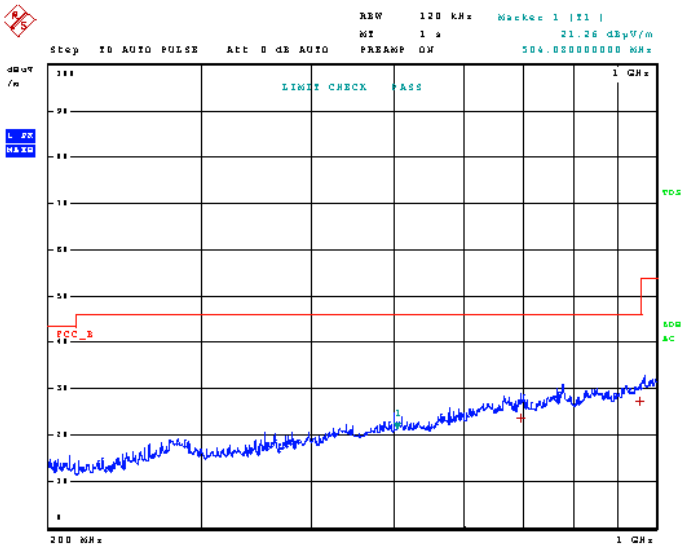
Polarity

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



Page 1 of 2

8.1.6 Scanning Receiver Function, 200 MHz to 1000 MHz, Horizontal Polarity Table

30.Dec 20 10:16

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	698.660000000 MHz	23.59	Quasi Peak	-22.41
1	957.590000000 MHz	27.28	Quasi Peak	-18.72

Page 2 of 2

8.1.7 Scanning Receiver Function, 200 MHz to 1000 MHz, Vertical Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:15

Test Spec CISPR 22 Radiated Disturbances

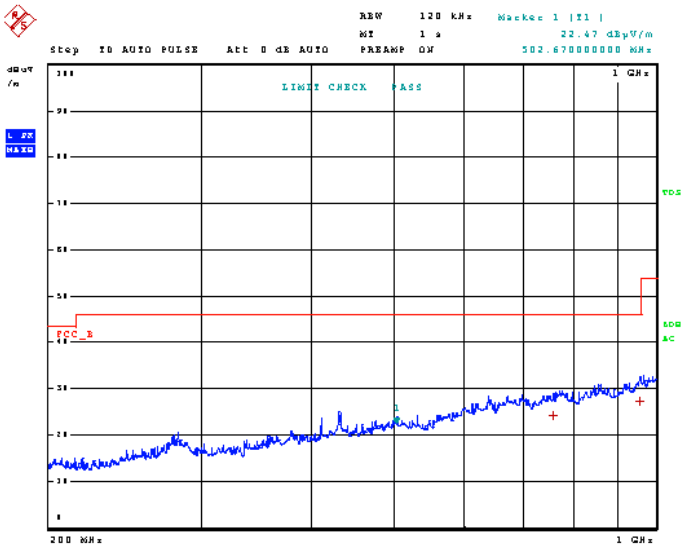
Polarity

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



Page 1 of 2

8.1.8 Scanning Receiver Function, 200 MHz to 1000 MHz, Vertical Polarity Table

30.Dec 20 10:15

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	760.070000000 MHz	24.19	Quasi Peak	-21.81
1	955.910000000 MHz	27.20	Quasi Peak	-18.80

Page 2 of 2

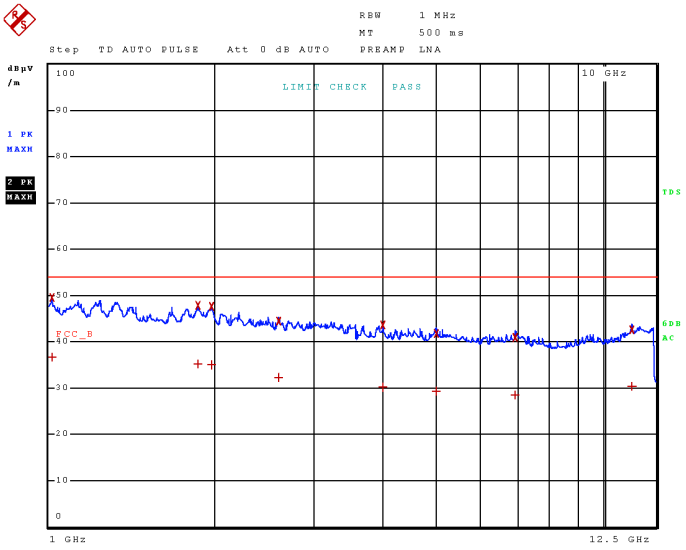
8.1.9 Scanning Receiver Function, above 1000 MHz, Horizontal Polarity Plot

29.Dec 20 18:33

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_05

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



8.1.10 Scanning Receiver Function, above 1000 MHz, Horizontal Polarity Table

29.Dec 20 18:33

Final Measurement

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

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.012750000 GHz	36.62	CISPR Averag	-17.38
2	1.012750000 GHz	49.41	Max Peak	
1	1.860250000 GHz	35.16	CISPR Averag	-18.84
2	1.860250000 GHz	47.90	Max Peak	
1	1.968750000 GHz	35.06	CISPR Averag	-18.94
2	1.968750000 GHz	47.60	Max Peak	
1	2.601000000 GHz	32.35	CISPR Averag	-21.65
2	2.601000000 GHz	44.35	Max Peak	
1	4.012000000 GHz	30.08	CISPR Averag	-23.92
2	4.012000000 GHz	43.52	Max Peak	
1	5.000000000 GHz	29.26	CISPR Averag	-24.74
2	5.000000000 GHz	41.66	Max Peak	
1	6.956750000 GHz	28.43	CISPR Averag	-25.57
2	6.956750000 GHz	40.95	Max Peak	
1	11.295500000 GHz	30.37	CISPR Averag	-23.63
2	11.295500000 GHz	42.60	Max Peak	

Page 2 of 2

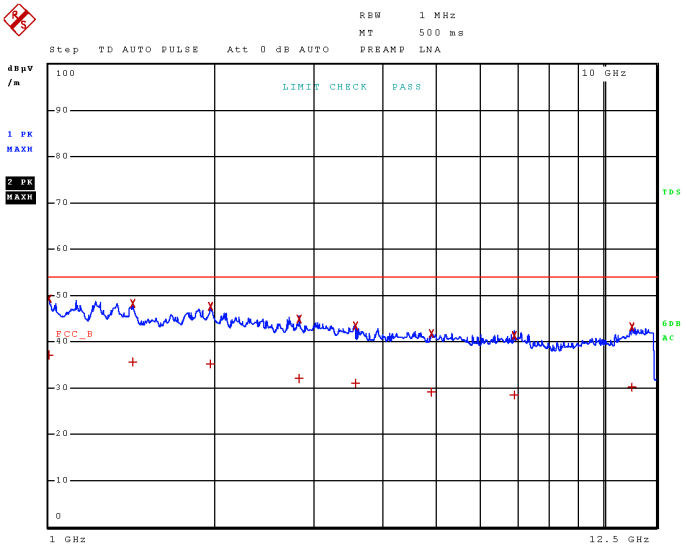
8.1.11 Scanning Receiver Function, above 1000 MHz, Vertical Polarity Plot

29.Dec 20 18:31

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_05

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



8.1.12 Scanning Receiver Function, above 1000 MHz, Vertical Polarity Table

29.Dec 20 18:31

Final Measurement

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

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.001750000 GHz	37.02	CISPR Averag	-16.98
2	1.001750000 GHz	49.22	Max Peak	
1	1.413500000 GHz	35.63	CISPR Averag	-18.37
2	1.413500000 GHz	48.13	Max Peak	
1	1.960750000 GHz	35.29	CISPR Averag	-18.71
2	1.960750000 GHz	47.59	Max Peak	
1	2.828500000 GHz	32.11	CISPR Averag	-21.89
2	2.828500000 GHz	44.88	Max Peak	
1	3.595000000 GHz	31.02	CISPR Averag	-22.98
2	3.595000000 GHz	43.38	Max Peak	
1	4.907250000 GHz	29.09	CISPR Averag	-24.91
2	4.907250000 GHz	41.68	Max Peak	
1	6.923500000 GHz	28.47	CISPR Averag	-25.53
2	6.923500000 GHz	41.26	Max Peak	
1	11.298500000 GHz	30.17	CISPR Averag	-23.83
2	11.298500000 GHz	43.10	Max Peak	

Page 2 of 2

8.1.13 25MHz, 30 MHz to 200 MHz, Horizontal Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:01

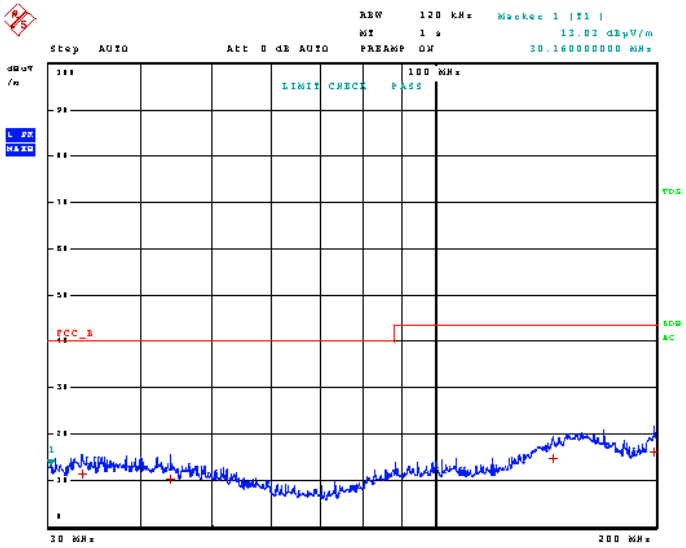
Test Spec CISPR 22 Radiated Disturbances

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 µs	Auto	20 dB	INPUT1



Page 1 of 2

8.1.14 25MHz, 30 MHz to 200 MHz, Horizontal Polarity Table

30.Dec 20 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	33.240000000 MHz	11.44	Quasi Peak	-28.56
1	43.880000000 MHz	10.27	Quasi Peak	-29.73
1	144.920000000 MHz	14.83	Quasi Peak	-28.67
1	198.680000000 MHz	16.03	Quasi Peak	-27.47

Page 2 of 2

8.1.15 25MHz, 30 MHz to 200 MHz, Vertical Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:02

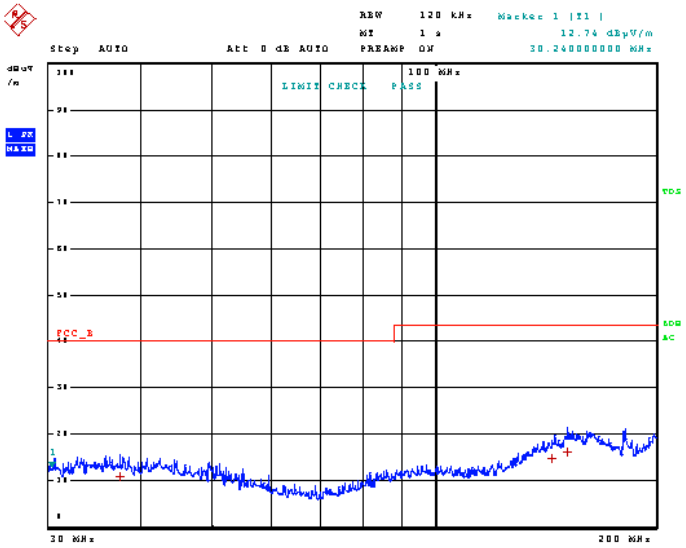
Test Spec CISPR 22 Radiated Disturbances

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 µs	Auto	20 dB	INPUT1



Page 1 of 2

8.1.16 25MHz, 30 MHz to 200 MHz, Vertical Polarity Table

30.Dec 20 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	37.400000000 MHz	10.88	Quasi Peak	-29.12
1	144.440000000 MHz	14.72	Quasi Peak	-28.78
1	151.400000000 MHz	15.98	Quasi Peak	-27.52

Page 2 of 2

8.1.17 25MHz, 200 MHz to 1000 MHz, Horizontal Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:06

Test Spec CISPR 22 Radiated Disturbances

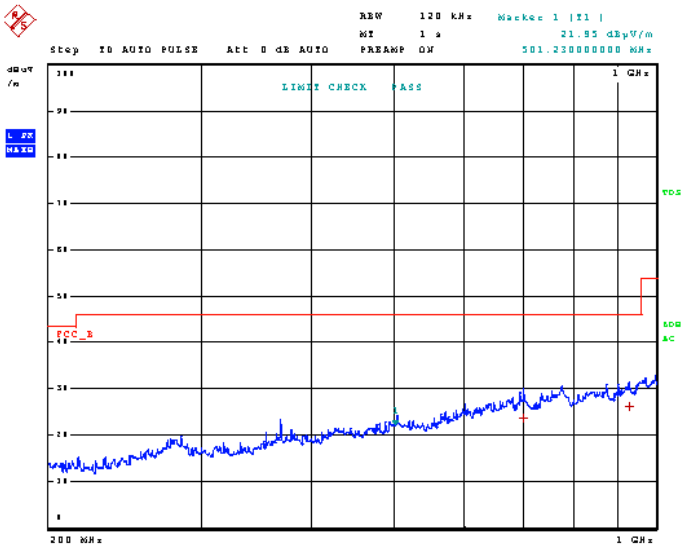
Polarity

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



Page 1 of 2

8.1.18 25MHz, 200 MHz to 1000 MHz, Horizontal Polarity Table

30.Dec 20 10:06

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	702.980000000 MHz	23.73	Quasi Peak	-22.27
1	930.740000000 MHz	26.22	Quasi Peak	-19.78

Page 2 of 2

8.1.19 25MHz, 200 MHz to 1000 MHz, Vertical Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:05

Test Spec CISPR 22 Radiated Disturbances

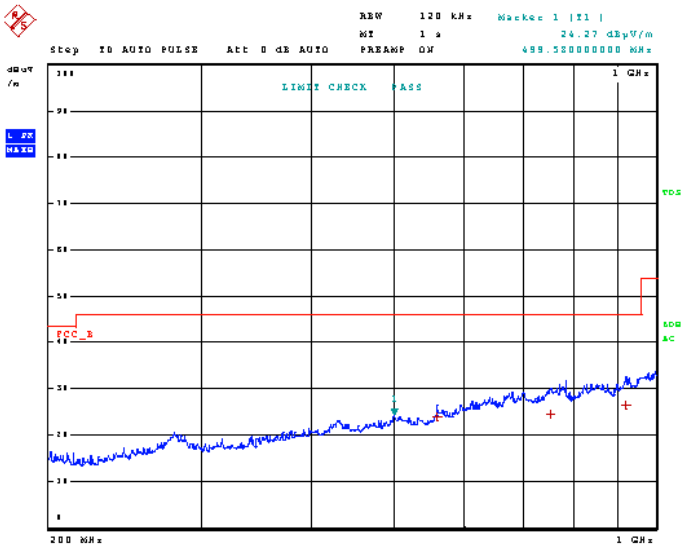
Polarity

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



Page 1 of 2

8.1.20 25MHz, 200 MHz to 1000 MHz, Vertical Polarity Table

30.Dec 20 10:05

Test Spec CISPR 22 Radiated Disturbances

Polarity
Horizontal

Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 3

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	560.330000000 MHz	24.16	Quasi Peak	-21.84
1	753.950000000 MHz	24.39	Quasi Peak	-21.61
1	922.880000000 MHz	26.32	Quasi Peak	-19.68

Page 2 of 2

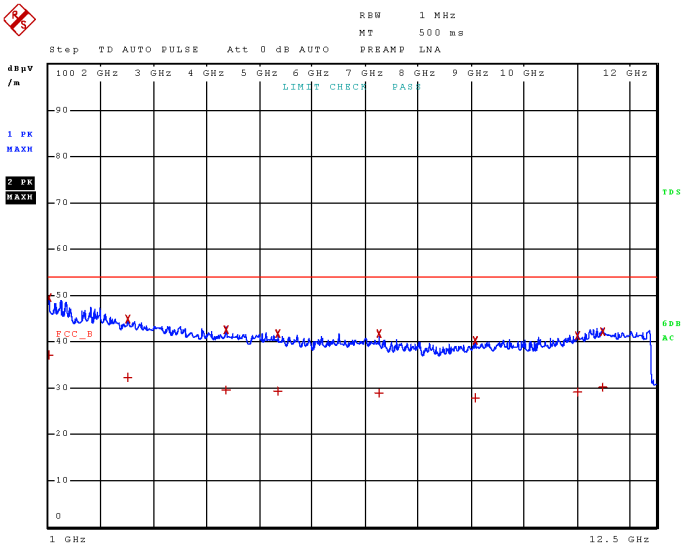
8.1.21 25MHz, above 1000 MHz, Horizontal Polarity Plot

29.Dec 20 18:54

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_05

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



Page 1 of 2

8.1.22 25MHz, above 1000 MHz, Horizontal Polarity Table

29.Dec 20 18:54

Final Measurement

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

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.001250000 GHz	37.04	CISPR Averag	-16.96
2	1.001250000 GHz	49.50	Max Peak	
1	2.489500000 GHz	32.18	CISPR Averag	-21.82
2	2.489500000 GHz	44.93	Max Peak	
1	4.350750000 GHz	29.62	CISPR Averag	-24.38
2	4.350750000 GHz	42.44	Max Peak	
1	5.332500000 GHz	29.29	CISPR Averag	-24.71
2	5.332500000 GHz	41.77	Max Peak	
1	7.243500000 GHz	28.88	CISPR Averag	-25.12
2	7.243500000 GHz	41.60	Max Peak	
1	9.068000000 GHz	27.89	CISPR Averag	-26.11
2	9.068000000 GHz	40.29	Max Peak	
1	11.003500000 GHz	29.03	CISPR Averag	-24.97
2	11.003500000 GHz	41.32	Max Peak	
1	11.490750000 GHz	30.12	CISPR Averag	-23.88
2	11.490750000 GHz	42.21	Max Peak	

Page 2 of 2

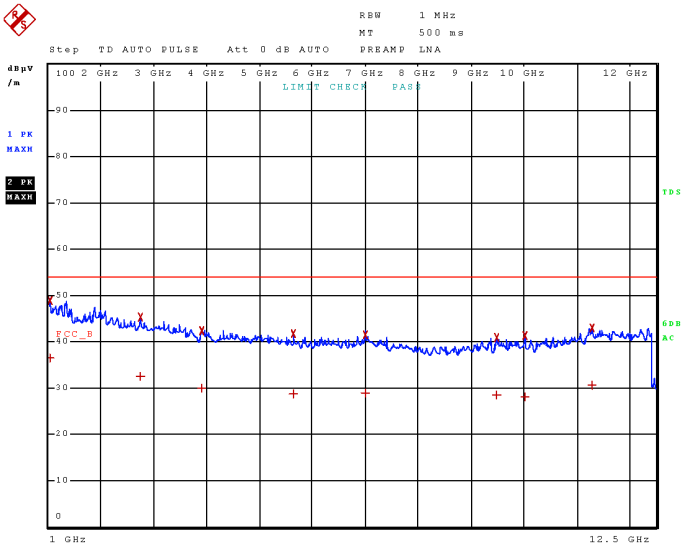
8.1.23 25MHz, above 1000 MHz, Vertical Polarity Plot

29.Dec 20 18:56

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_05

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



8.1.24 25MHz, above 1000 MHz, Vertical Polarity Table

29.Dec 20 18:56

Final Measurement

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

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.016250000 GHz	36.51	CISPR Averag	-17.49
2	1.016250000 GHz	48.92	Max Peak	
1	2.733750000 GHz	32.48	CISPR Averag	-21.52
2	2.733750000 GHz	45.18	Max Peak	
1	3.896500000 GHz	29.92	CISPR Averag	-24.08
2	3.896500000 GHz	42.38	Max Peak	
1	5.632000000 GHz	28.75	CISPR Averag	-25.25
2	5.632000000 GHz	41.70	Max Peak	
1	6.985000000 GHz	28.81	CISPR Averag	-25.19
2	6.985000000 GHz	41.42	Max Peak	
1	9.479500000 GHz	28.45	CISPR Averag	-25.55
2	9.479500000 GHz	40.79	Max Peak	
1	10.003750000 GHz	28.10	CISPR Averag	-25.90
2	10.003750000 GHz	41.35	Max Peak	
1	11.291250000 GHz	30.51	CISPR Averag	-23.49
2	11.291250000 GHz	42.86	Max Peak	

Page 2 of 2

8.1.25 54MHz, 30 MHz to 200 MHz, Horizontal Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 09:44

Test Spec CISPR 22 Radiated Disturbances

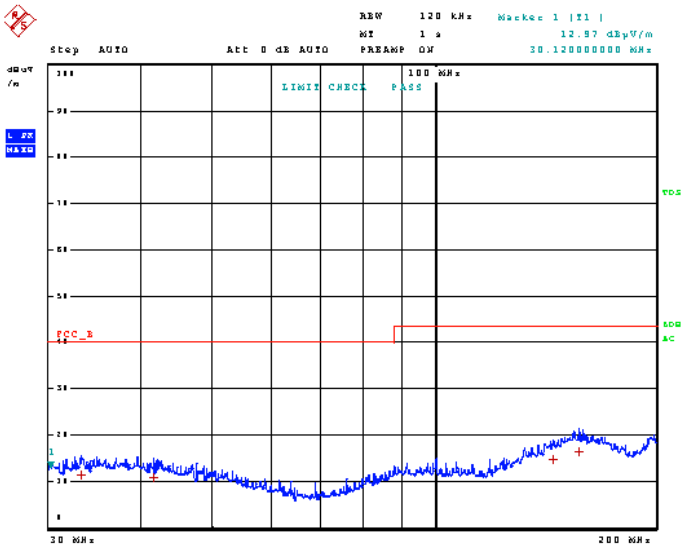
Polarity

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 µs	Auto	20 dB	INPUT1



Page 1 of 2

8.1.26 54MHz, 30 MHz to 200 MHz, Horizontal Polarity Table

30.Dec 20 09:44

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	33.160000000 MHz	11.45	Quasi Peak	-28.55
1	41.680000000 MHz	10.75	Quasi Peak	-29.25
1	144.720000000 MHz	14.76	Quasi Peak	-28.74
1	157.400000000 MHz	16.46	Quasi Peak	-27.04

Page 2 of 2

8.1.27 54MHz, 30 MHz to 200 MHz, Vertical Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 09:43

Test Spec CISPR 22 Radiated Disturbances

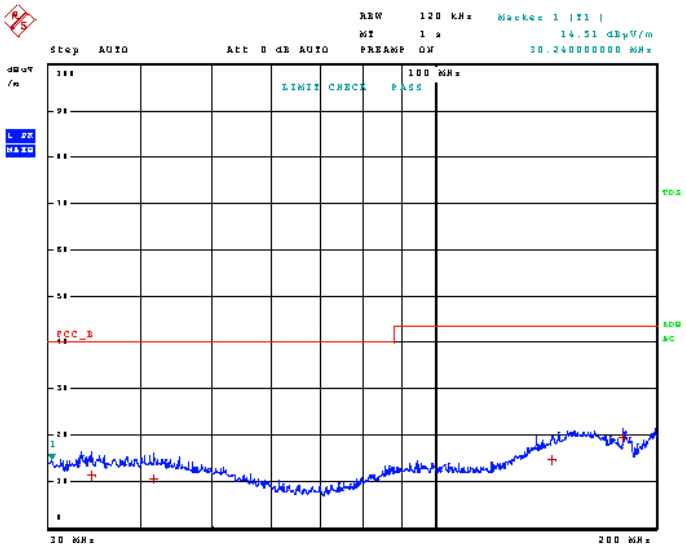
Polarity

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 µs	Auto	20 dB	INPUT1



Page 1 of 2

8.1.28 54MHz, 30 MHz to 200 MHz, Vertical Polarity Table

30.Dec 20 09:43

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	34.280000000 MHz	11.29	Quasi Peak	-28.71
1	41.600000000 MHz	10.71	Quasi Peak	-29.29
1	144.280000000 MHz	14.69	Quasi Peak	-28.81
1	180.320000000 MHz	19.52	Quasi Peak	-23.98

Page 2 of 2

8.1.29 54MHz, 200 MHz to 1000 MHz, Horizontal Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:07

Test Spec CISPR 22 Radiated Disturbances

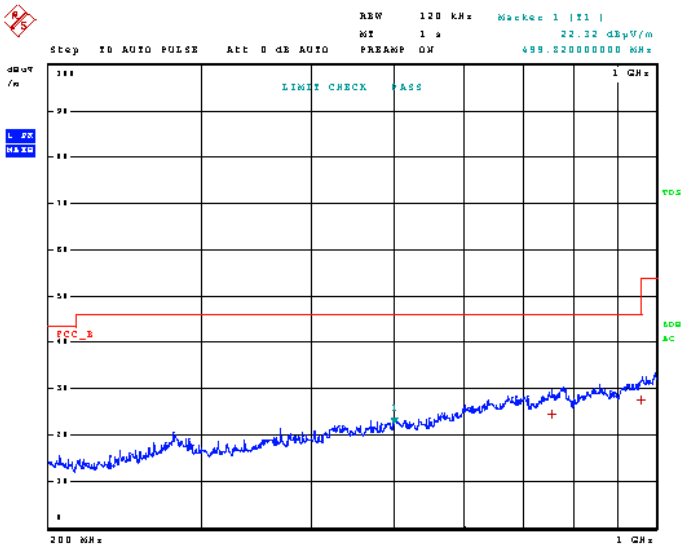
Polarity

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



Page 1 of 2

8.1.30 54MHz, 200 MHz to 1000 MHz, Horizontal Polarity Table

30.Dec 20 10:07

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	757.850000000 MHz	24.37	Quasi Peak	-21.63
1	959.960000000 MHz	27.54	Quasi Peak	-18.46

Page 2 of 2

8.1.31 54MHz, 200 MHz to 1000 MHz, Vertical Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:08

Test Spec CISPR 22 Radiated Disturbances

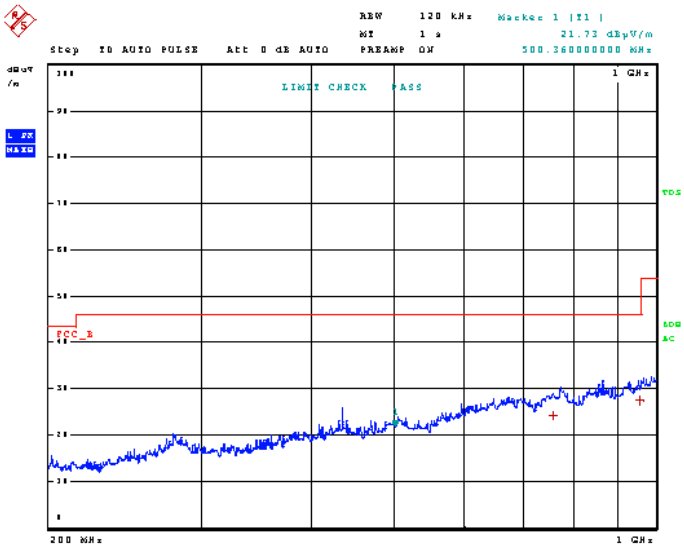
Polarity

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



8.1.32 54MHz, 200 MHz to 1000 MHz, Vertical Polarity Table

30.Dec 20 10:08

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	761.510000000 MHz	24.25	Quasi Peak	-21.75
1	958.910000000 MHz	27.45	Quasi Peak	-18.55

Page 2 of 2

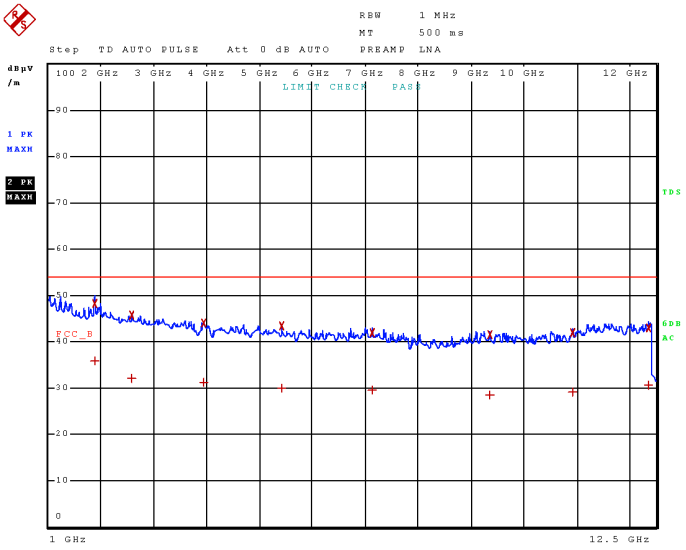
8.1.33 54MHz, above 1000 MHz, Horizontal Polarity Plot

30.Dec 20 09:01

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_05

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



8.1.34 54MHz, above 1000 MHz, Horizontal Polarity Table

30.Dec 20 09:01

Final Measurement

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

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.860500000 GHz	35.74	CISPR Averag	-18.26
2	1.860500000 GHz	48.30	Max Peak	
1	2.564750000 GHz	31.99	CISPR Averag	-22.01
2	2.564750000 GHz	45.65	Max Peak	
1	3.932500000 GHz	31.26	CISPR Averag	-22.74
2	3.932500000 GHz	43.98	Max Peak	
1	5.410500000 GHz	30.03	CISPR Averag	-23.97
2	5.410500000 GHz	43.35	Max Peak	
1	7.113000000 GHz	29.60	CISPR Averag	-24.40
2	7.113000000 GHz	41.95	Max Peak	
1	9.348000000 GHz	28.52	CISPR Averag	-25.48
2	9.348000000 GHz	41.41	Max Peak	
1	10.923500000 GHz	29.07	CISPR Averag	-24.93
2	10.923500000 GHz	41.97	Max Peak	
1	12.347750000 GHz	30.51	CISPR Averag	-23.49
2	12.347750000 GHz	43.01	Max Peak	

Page 2 of 2

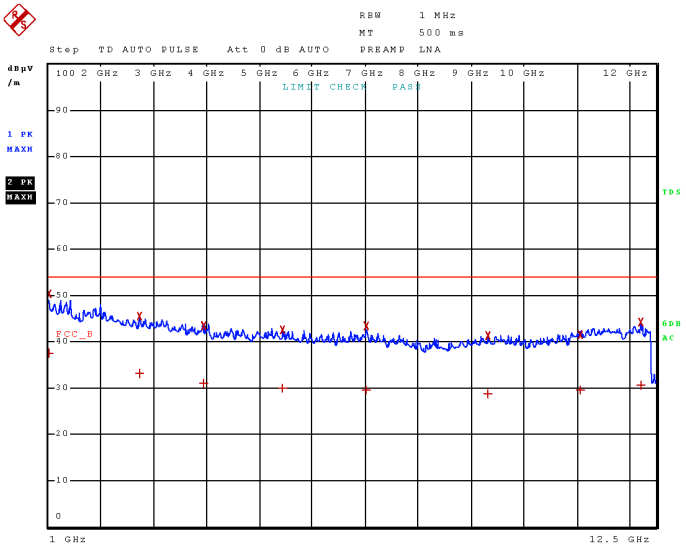
8.1.35 54MHz, above 1000 MHz, Vertical Polarity Plot

30.Dec 20 09:04

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_05

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



8.1.36 54MHz, above 1000 MHz, Vertical Polarity Table

30.Dec 20 09:04

Final Measurement

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

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.004250000 GHz	37.60	CISPR Averag	-16.40
2	1.004250000 GHz	50.34	Max Peak	
1	2.717250000 GHz	33.09	CISPR Averag	-20.91
2	2.717250000 GHz	45.51	Max Peak	
1	3.937250000 GHz	31.08	CISPR Averag	-22.92
2	3.937250000 GHz	43.46	Max Peak	
1	5.420250000 GHz	29.85	CISPR Averag	-24.15
2	5.420250000 GHz	42.54	Max Peak	
1	7.002750000 GHz	29.59	CISPR Averag	-24.41
2	7.002750000 GHz	43.48	Max Peak	
1	9.320500000 GHz	28.61	CISPR Averag	-25.39
2	9.320500000 GHz	41.22	Max Peak	
1	11.062250000 GHz	29.43	CISPR Averag	-24.57
2	11.062250000 GHz	41.50	Max Peak	
1	12.205500000 GHz	30.66	CISPR Averag	-23.34
2	12.205500000 GHz	44.29	Max Peak	

Page 2 of 2

8.1.37 108MHz, 30 MHz to 200 MHz, Horizontal Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 09:58

Test Spec CISPR 22 Radiated Disturbances

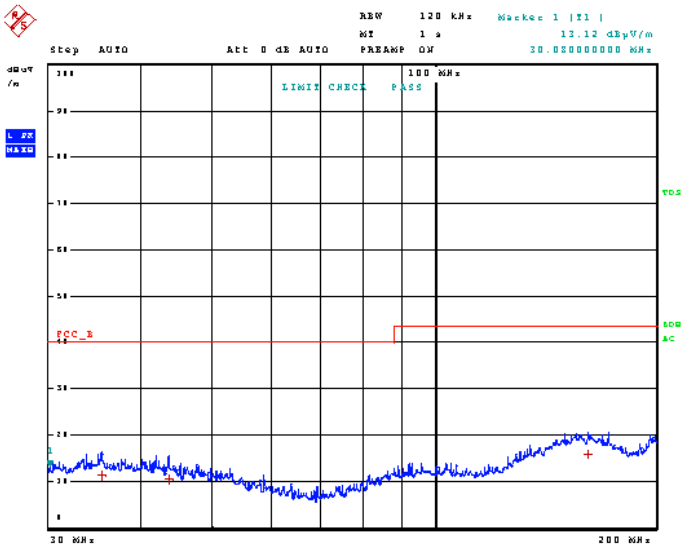
Polarity

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 µs	Auto	20 dB	INPUT1



Page 1 of 2

8.1.38 108MHz, 30 MHz to 200 MHz, Horizontal Polarity Table

30.Dec 20 09:58

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	35.320000000 MHz	11.31	Quasi Peak	-28.69
1	43.560000000 MHz	10.31	Quasi Peak	-29.69
1	161.600000000 MHz	15.93	Quasi Peak	-27.57

Page 2 of 2

8.1.39 108MHz, 30 MHz to 200 MHz, Vertical Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 09:57

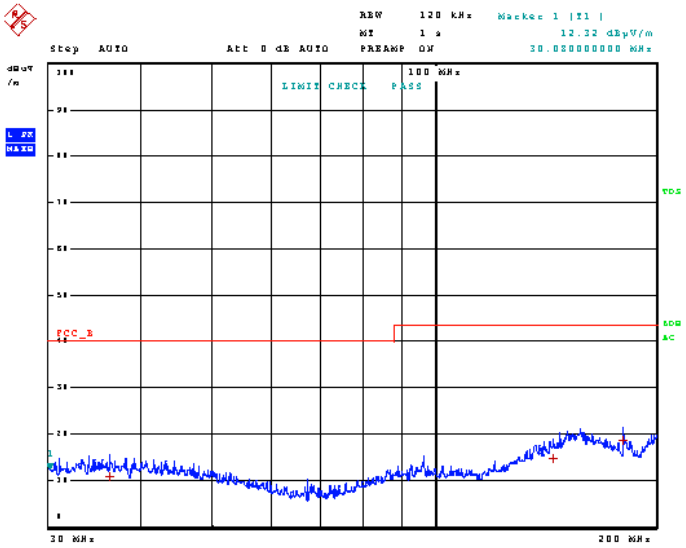
Test Spec CISPR 22 Radiated Disturbances

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 µs	Auto	20 dB	INPUT1



Page 1 of 2

8.1.40 108MHz, 30 MHz to 200 MHz, Vertical Polarity Table

30.Dec 20 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	36.200000000 MHz	10.81	Quasi Peak	-29.19
1	145.040000000 MHz	14.81	Quasi Peak	-28.69
1	180.280000000 MHz	18.64	Quasi Peak	-24.86

Page 2 of 2

8.1.41 108MHz, 200 MHz to 1000 MHz, Horizontal Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:28

Test Spec CISPR 22 Radiated Disturbances

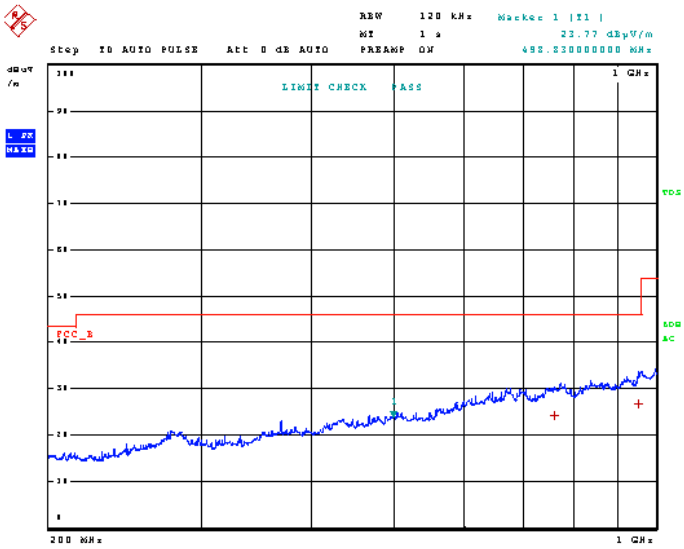
Polarity

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



Page 1 of 2

8.1.42 108MHz, 200 MHz to 1000 MHz, Horizontal Polarity Table

30.Dec 20 10:28

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	763.280000000 MHz	24.18	Quasi Peak	-21.82
1	953.480000000 MHz	26.85	Quasi Peak	-19.15

Page 2 of 2

8.1.43 108MHz, 200 MHz to 1000 MHz, Vertical Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:25

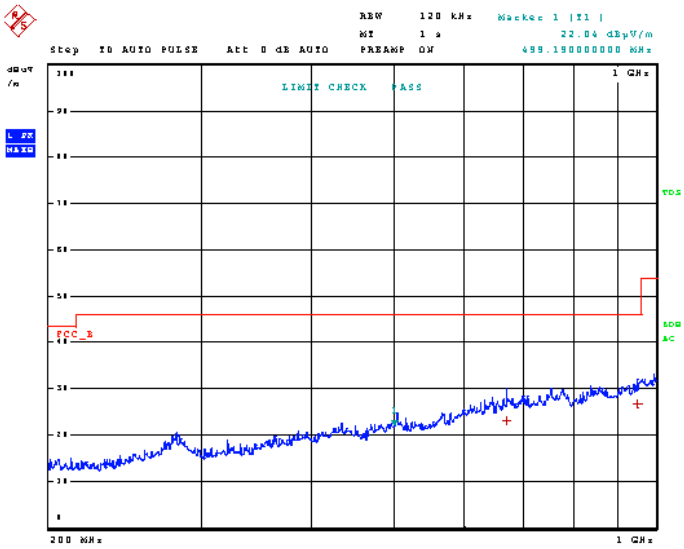
Test Spec CISPR 22 Radiated Disturbances

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



Page 1 of 2

8.1.44 108MHz, 200 MHz to 1000 MHz, Vertical Polarity Table

30.Dec 20 10:25

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	671.420000000 MHz	23.13	Quasi Peak	-22.87
1	952.220000000 MHz	26.74	Quasi Peak	-19.26

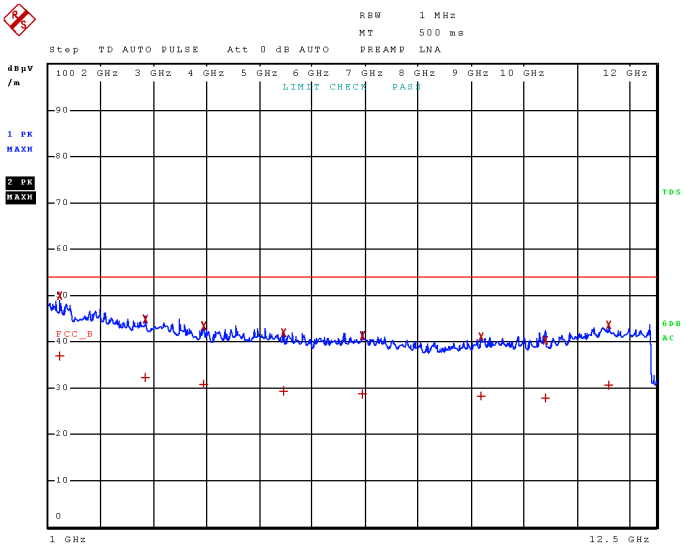
8.1.45 108MHz, above 1000 MHz, Horizontal Polarity Plot

30.Dec 20 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_05

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



8.1.46 108MHz, above 1000 MHz, Horizontal Polarity Table

30.Dec 20 09:15

Final Measurement

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

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.211250000 GHz	36.79	CISPR Averag	-17.21
2	1.211250000 GHz	49.84	Max Peak	
1	2.830500000 GHz	32.33	CISPR Averag	-21.67
2	2.830500000 GHz	44.94	Max Peak	
1	3.928750000 GHz	30.82	CISPR Averag	-23.18
2	3.928750000 GHz	43.35	Max Peak	
1	5.436750000 GHz	29.41	CISPR Averag	-24.59
2	5.436750000 GHz	41.85	Max Peak	
1	6.934500000 GHz	28.68	CISPR Averag	-25.32
2	6.934500000 GHz	41.29	Max Peak	
1	9.182000000 GHz	28.30	CISPR Averag	-25.70
2	9.182000000 GHz	41.07	Max Peak	
1	10.408000000 GHz	27.83	CISPR Averag	-26.17
2	10.408000000 GHz	40.20	Max Peak	
1	11.597250000 GHz	30.48	CISPR Averag	-23.52
2	11.597250000 GHz	43.52	Max Peak	

Page 2 of 2

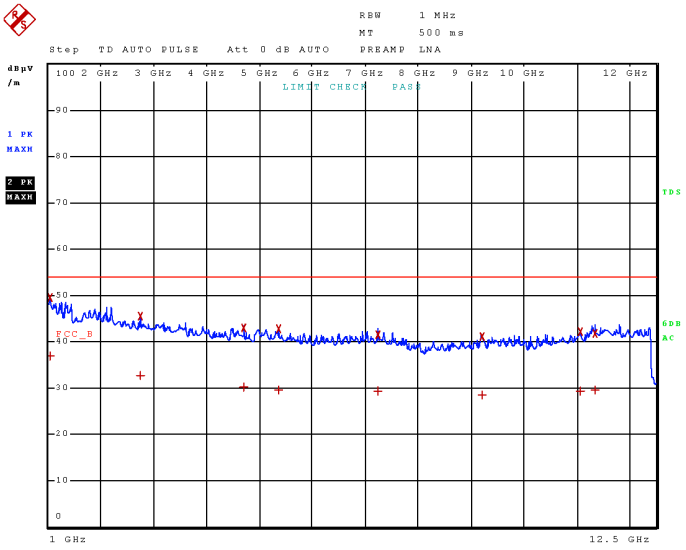
8.1.47 108MHz, above 1000 MHz, Vertical Polarity Plot

30.Dec 20 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_05

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



8.1.48 108MHz, above 1000 MHz, Vertical Polarity Table

30.Dec 20 09:13

Final Measurement

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

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.015750000 GHz	36.85	CISPR Averag	-17.15
2	1.015750000 GHz	49.46	Max Peak	
1	2.727750000 GHz	32.75	CISPR Averag	-21.25
2	2.727750000 GHz	45.41	Max Peak	
1	4.687750000 GHz	30.23	CISPR Averag	-23.77
2	4.687750000 GHz	42.91	Max Peak	
1	5.343500000 GHz	29.59	CISPR Averag	-24.41
2	5.343500000 GHz	42.71	Max Peak	
1	7.231250000 GHz	29.25	CISPR Averag	-24.75
2	7.231250000 GHz	41.44	Max Peak	
1	9.196500000 GHz	28.46	CISPR Averag	-25.54
2	9.196500000 GHz	40.97	Max Peak	
1	11.059250000 GHz	29.29	CISPR Averag	-24.71
2	11.059250000 GHz	42.10	Max Peak	
1	11.341000000 GHz	29.54	CISPR Averag	-24.46
2	11.341000000 GHz	41.73	Max Peak	

Page 2 of 2

8.1.49 174MHz, 30 MHz to 200 MHz, Horizontal Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 09:35

Test Spec CISPR 22 Radiated Disturbances

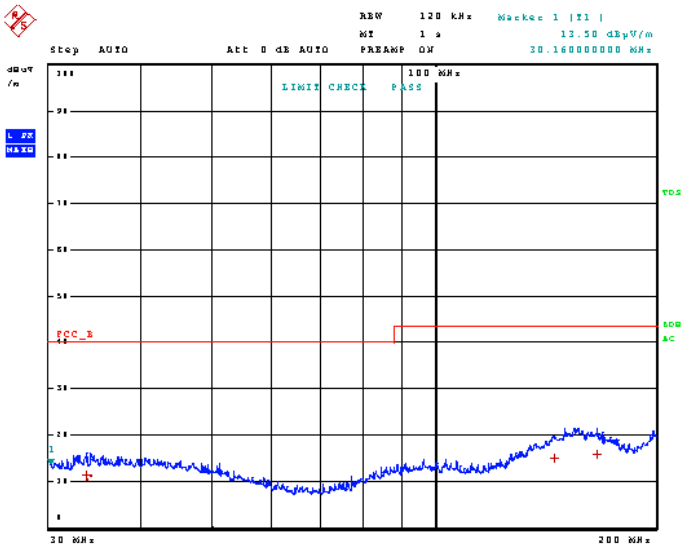
Polarity

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 µs	Auto	20 dB	INPUT1



Page 1 of 2

8.1.50 174MHz, 30 MHz to 200 MHz, Horizontal Polarity Table

30.Dec 20 09:35

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	33.720000000 MHz	11.26	Quasi Peak	-28.74
1	145.200000000 MHz	14.92	Quasi Peak	-28.58
1	166.160000000 MHz	15.85	Quasi Peak	-27.65

Page 2 of 2

8.1.51 174MHz, 30 MHz to 200 MHz, Vertical Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 09:31

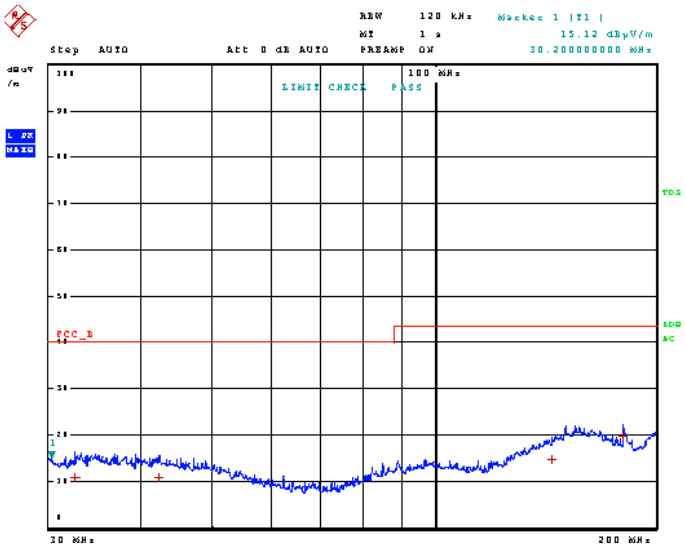
Test Spec CISPR 22 Radiated Disturbances

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 µs	Auto	20 dB	INPUT1



Page 1 of 2

8.1.52 174MHz, 30 MHz to 200 MHz, Vertical Polarity Table

30.Dec 20 09:31

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	32.480000000 MHz	10.92	Quasi Peak	-29.08
1	42.320000000 MHz	10.75	Quasi Peak	-29.25
1	144.440000000 MHz	14.73	Quasi Peak	-28.77
1	180.320000000 MHz	19.69	Quasi Peak	-23.81

Page 2 of 2

8.1.53 174MHz, 200 MHz to 1000 MHz, Horizontal Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:22

Test Spec CISPR 22 Radiated Disturbances

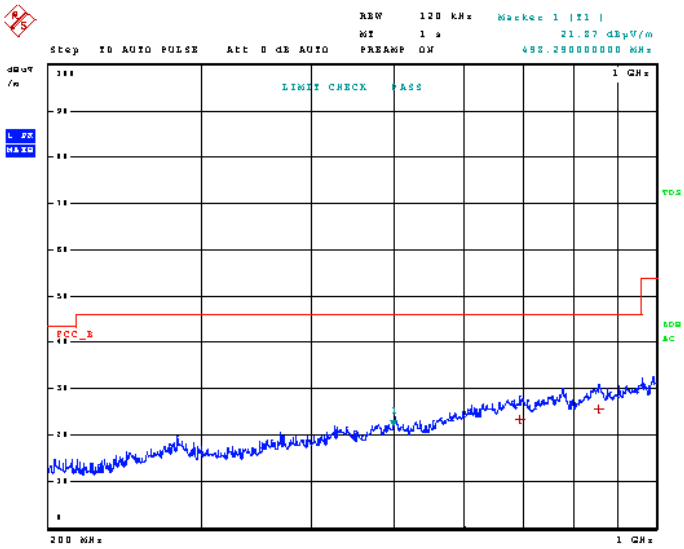
Polarity

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



Page 1 of 2

8.1.54 174MHz, 200 MHz to 1000 MHz, Horizontal Polarity Table

30.Dec 20 10:22

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	697.040000000 MHz	23.34	Quasi Peak	-22.66
1	858.320000000 MHz	25.48	Quasi Peak	-20.52

Page 2 of 2

8.1.55 174MHz, 200 MHz to 1000 MHz, Vertical Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:21

Test Spec CISPR 22 Radiated Disturbances

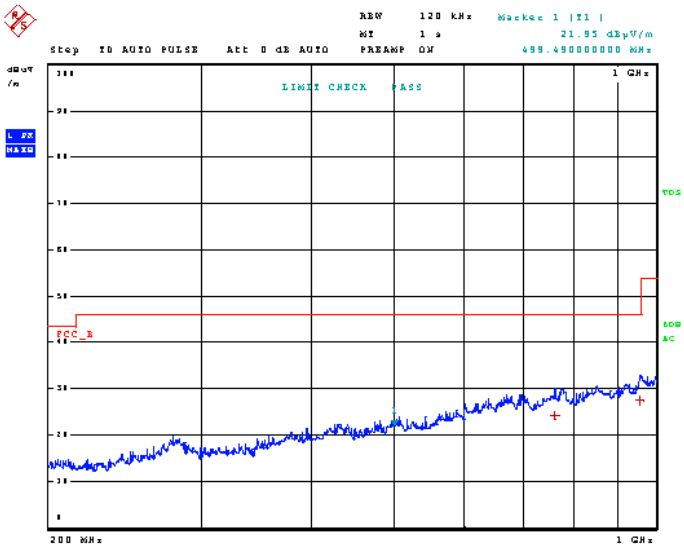
Polarity

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



8.1.56 174MHz, 200 MHz to 1000 MHz, Vertical Polarity Table

30.Dec 20 10:21

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	763.970000000 MHz	24.17	Quasi Peak	-21.83
1	958.040000000 MHz	27.35	Quasi Peak	-18.65

Page 2 of 2

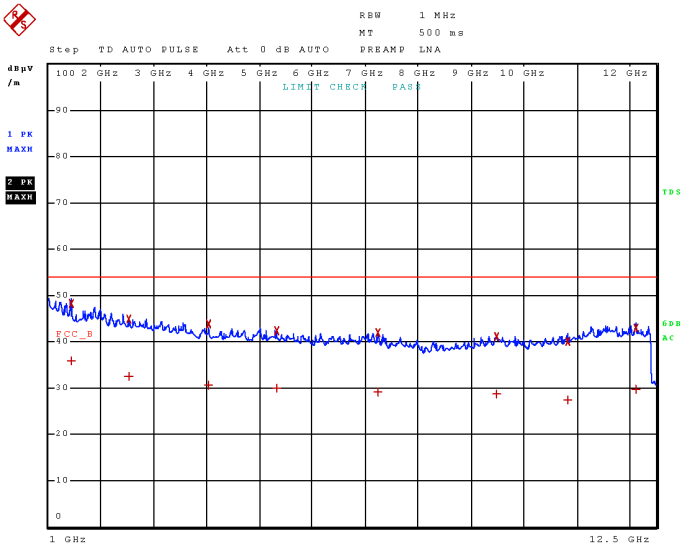
8.1.57 174MHz, above 1000 MHz, Horizontal Polarity Plot

30.Dec 20 09:18

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_05

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



Page 1 of 2

8.1.58 174MHz, above 1000 MHz, Horizontal Polarity Table

30.Dec 20 09:18

Final Measurement

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

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.414500000 GHz	35.72	CISPR Averag	-18.28
2	1.414500000 GHz	48.19	Max Peak	
1	2.512750000 GHz	32.48	CISPR Averag	-21.52
2	2.512750000 GHz	44.91	Max Peak	
1	4.030250000 GHz	30.53	CISPR Averag	-23.47
2	4.030250000 GHz	43.86	Max Peak	
1	5.313000000 GHz	29.97	CISPR Averag	-24.03
2	5.313000000 GHz	42.43	Max Peak	
1	7.231250000 GHz	29.10	CISPR Averag	-24.90
2	7.231250000 GHz	41.94	Max Peak	
1	9.481000000 GHz	28.58	CISPR Averag	-25.42
2	9.481000000 GHz	41.00	Max Peak	
1	10.828500000 GHz	27.42	CISPR Averag	-26.58
2	10.828500000 GHz	39.99	Max Peak	
1	12.108000000 GHz	29.82	CISPR Averag	-24.18
2	12.108000000 GHz	43.05	Max Peak	

Page 2 of 2

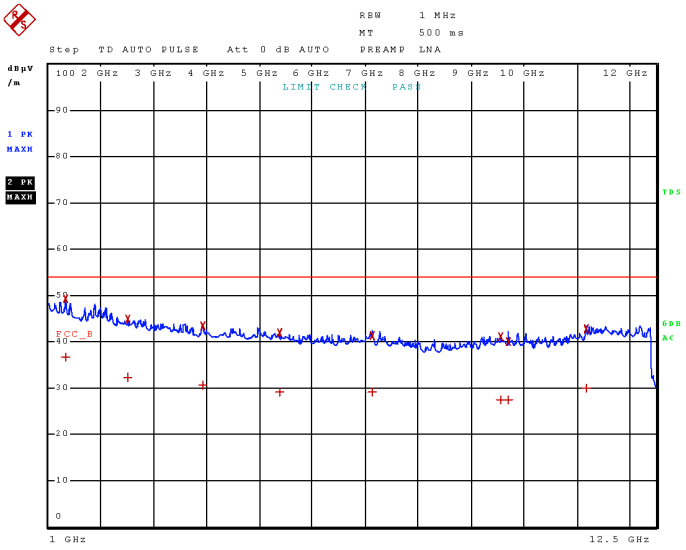
8.1.59 174MHz, above 1000 MHz, Vertical Polarity Plot

30.Dec 20 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_05

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



8.1.60 174MHz, above 1000 MHz, Vertical Polarity Table

30.Dec 20 09:20

Final Measurement

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

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.316750000 GHz	36.64	CISPR Averag	-17.36
2	1.316750000 GHz	49.28	Max Peak	
1	2.488750000 GHz	32.25	CISPR Averag	-21.75
2	2.488750000 GHz	44.75	Max Peak	
1	3.905500000 GHz	30.53	CISPR Averag	-23.47
2	3.905500000 GHz	43.36	Max Peak	
1	5.369500000 GHz	29.07	CISPR Averag	-24.93
2	5.369500000 GHz	41.91	Max Peak	
1	7.125750000 GHz	29.05	CISPR Averag	-24.95
2	7.125750000 GHz	41.26	Max Peak	
1	9.544000000 GHz	27.38	CISPR Averag	-26.62
2	9.544000000 GHz	41.10	Max Peak	
1	9.699250000 GHz	27.49	CISPR Averag	-26.51
2	9.699250000 GHz	40.01	Max Peak	
1	11.177750000 GHz	29.95	CISPR Averag	-24.05
2	11.177750000 GHz	42.81	Max Peak	

Page 2 of 2

8.1.61 406MHz, 30 MHz to 200 MHz, Horizontal Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 09:38

Test Spec CISPR 22 Radiated Disturbances

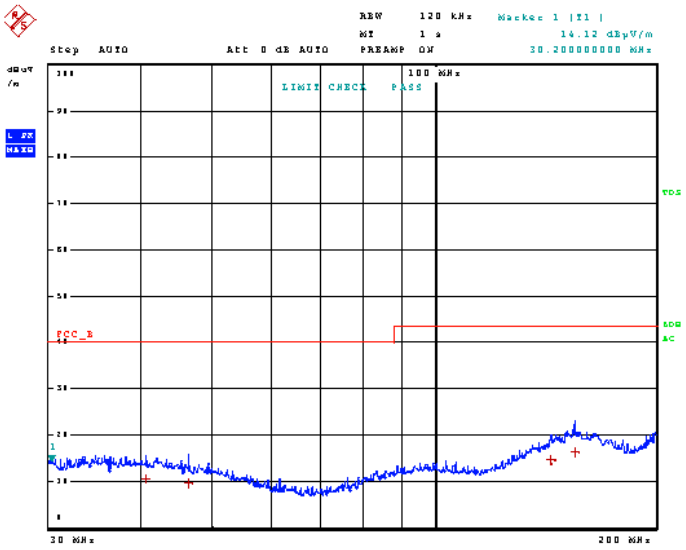
Polarity

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 µs	Auto	20 dB	INPUT1



Page 1 of 2

8.1.62 406MHz, 30 MHz to 200 MHz, Horizontal Polarity Table

30.Dec 20 09:38

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	40.600000000 MHz	10.64	Quasi Peak	-29.36
1	46.320000000 MHz	9.57	Quasi Peak	-30.43
1	144.000000000 MHz	14.65	Quasi Peak	-28.85
1	155.040000000 MHz	16.34	Quasi Peak	-27.16

Page 2 of 2

8.1.63 406MHz, 30 MHz to 200 MHz, Vertical Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 09:39

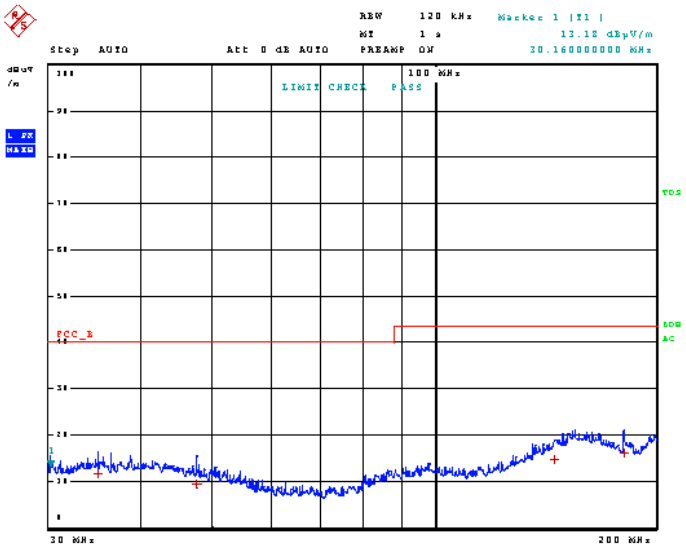
Test Spec CISPR 22 Radiated Disturbances

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 µs	Auto	20 dB	INPUT1



Page 1 of 2

8.1.64 406MHz, 30 MHz to 200 MHz, Vertical Polarity Table

30.Dec 20 09:39

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	34.920000000 MHz	11.56	Quasi Peak	-28.44
1	47.520000000 MHz	9.32	Quasi Peak	-30.68
1	145.200000000 MHz	14.87	Quasi Peak	-28.63
1	180.640000000 MHz	16.15	Quasi Peak	-27.35

Page 2 of 2

8.1.65 406MHz, 200 MHz to 1000 MHz, Horizontal Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:10

Test Spec CISPR 22 Radiated Disturbances

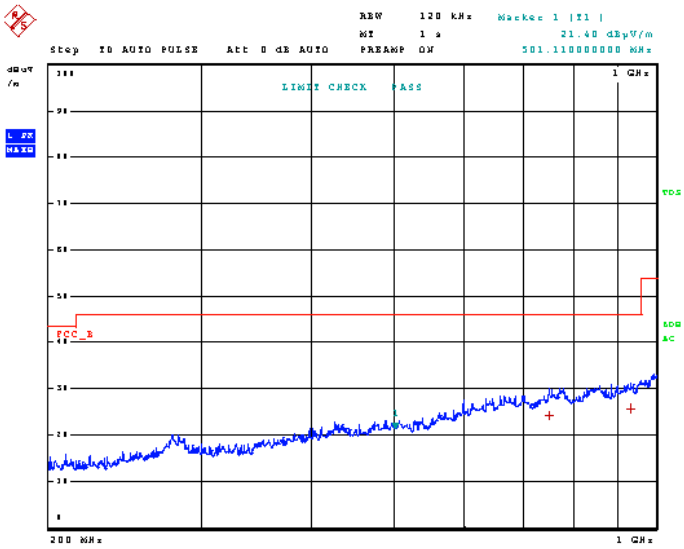
Polarity

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



Page 1 of 2

8.1.66 406MHz, 200 MHz to 1000 MHz, Horizontal Polarity Table

30.Dec 20 10:10

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	753.260000000 MHz	24.26	Quasi Peak	-21.74
1	936.140000000 MHz	25.64	Quasi Peak	-20.36

Page 2 of 2

8.1.67 406MHz, 200 MHz to 1000 MHz, Vertical Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:10

Test Spec CISPR 22 Radiated Disturbances

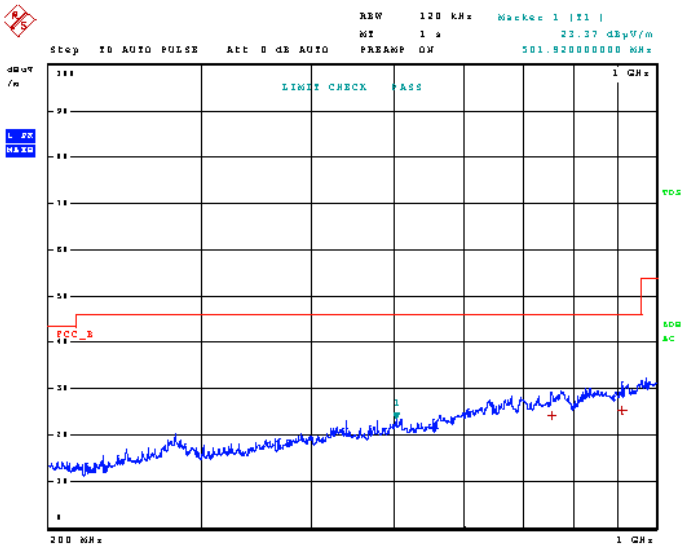
Polarity

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



Page 1 of 2

8.1.68 406MHz, 200 MHz to 1000 MHz, Vertical Polarity Table

30.Dec 20 10:10

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	758.390000000 MHz	24.33	Quasi Peak	-21.67
1	912.800000000 MHz	25.32	Quasi Peak	-20.68

Page 2 of 2

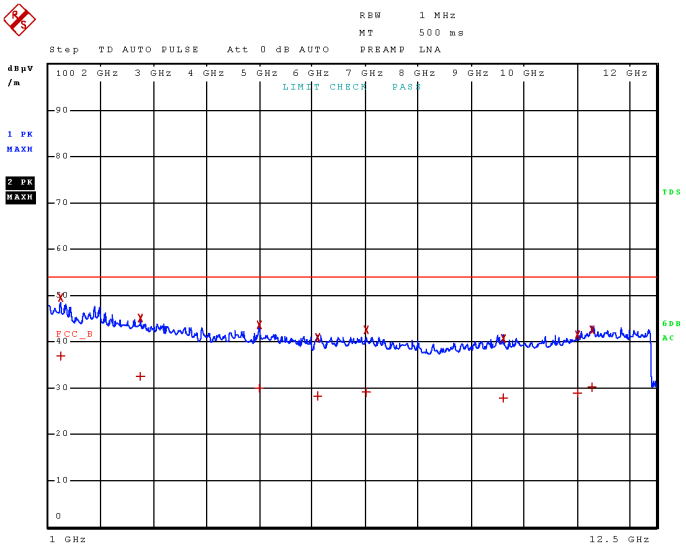
8.1.69 406MHz, above 1000 MHz, Horizontal Polarity Plot

29.Dec 20 18:45

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_05

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



8.1.70 406MHz, above 1000 MHz, Horizontal Polarity Table

29.Dec 20 18:45

Final Measurement

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

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.224250000 GHz	36.77	CISPR Averag	-17.23
2	1.224250000 GHz	49.55	Max Peak	
1	2.731000000 GHz	32.49	CISPR Averag	-21.51
2	2.731000000 GHz	45.12	Max Peak	
1	4.974750000 GHz	29.86	CISPR Averag	-24.14
2	4.974750000 GHz	43.62	Max Peak	
1	6.089500000 GHz	28.15	CISPR Averag	-25.85
2	6.089500000 GHz	40.83	Max Peak	
1	7.009500000 GHz	29.06	CISPR Averag	-24.94
2	7.009500000 GHz	42.51	Max Peak	
1	9.603000000 GHz	27.85	CISPR Averag	-26.15
2	9.603000000 GHz	40.71	Max Peak	
1	11.002500000 GHz	28.85	CISPR Averag	-25.15
2	11.002500000 GHz	41.44	Max Peak	
1	11.286000000 GHz	30.13	CISPR Averag	-23.87
2	11.286000000 GHz	42.46	Max Peak	

Page 2 of 2

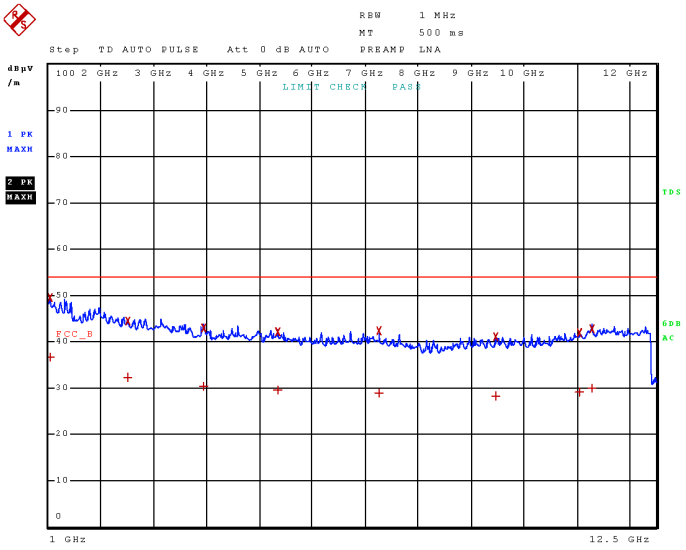
8.1.71 406MHz, above 1000 MHz, Vertical Polarity Plot

29.Dec 20 18:47

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_05

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



8.1.72 406MHz, above 1000 MHz, Vertical Polarity Table

29.Dec 20 18:47

Final Measurement

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

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.012250000 GHz	36.65	CISPR Averag	-17.35
2	1.012250000 GHz	49.38	Max Peak	
1	2.494750000 GHz	32.15	CISPR Averag	-21.85
2	2.494750000 GHz	44.49	Max Peak	
1	3.924000000 GHz	30.33	CISPR Averag	-23.67
2	3.924000000 GHz	43.01	Max Peak	
1	5.325000000 GHz	29.46	CISPR Averag	-24.54
2	5.325000000 GHz	42.13	Max Peak	
1	7.238750000 GHz	28.86	CISPR Averag	-25.14
2	7.238750000 GHz	42.29	Max Peak	
1	9.460250000 GHz	28.22	CISPR Averag	-25.78
2	9.460250000 GHz	41.04	Max Peak	
1	11.043000000 GHz	29.00	CISPR Averag	-25.00
2	11.043000000 GHz	41.97	Max Peak	
1	11.285000000 GHz	30.01	CISPR Averag	-23.99
2	11.285000000 GHz	42.71	Max Peak	

Page 2 of 2

8.1.73 512MHz, 30 MHz to 200 MHz, Horizontal Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 09:50

Test Spec CISPR 22 Radiated Disturbances

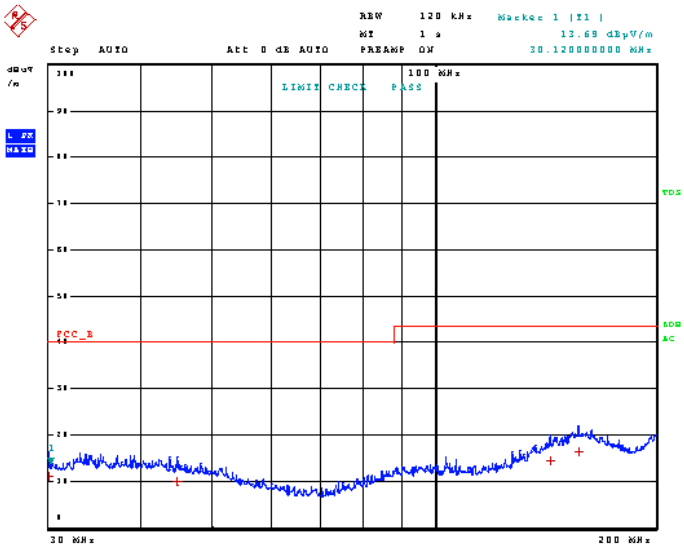
Polarity

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 µs	Auto	20 dB	INPUT1



Page 1 of 2

8.1.74 512MHz, 30 MHz to 200 MHz, Horizontal Polarity Table

30.Dec 20 09:50

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	30.000000000 MHz	10.97	Quasi Peak	-29.03
1	44.760000000 MHz	9.91	Quasi Peak	-30.09
1	143.720000000 MHz	14.49	Quasi Peak	-29.01
1	156.880000000 MHz	16.48	Quasi Peak	-27.02

Page 2 of 2

8.1.75 512MHz, 30 MHz to 200 MHz, Vertical Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 09:52

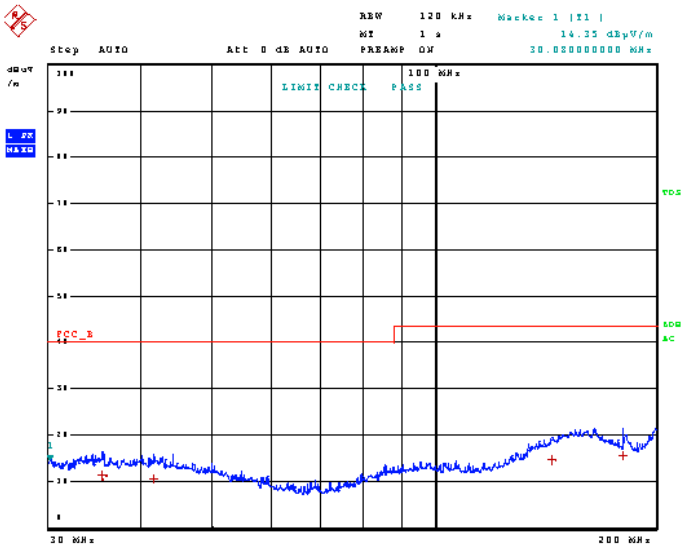
Test Spec CISPR 22 Radiated Disturbances

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 µs	Auto	20 dB	INPUT1



Page 1 of 2

8.1.76 512MHz, 30 MHz to 200 MHz, Vertical Polarity Table

30.Dec 20 09:52

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	35.400000000 MHz	11.25	Quasi Peak	-28.75
1	41.600000000 MHz	10.69	Quasi Peak	-29.31
1	144.240000000 MHz	14.70	Quasi Peak	-28.80
1	180.480000000 MHz	15.74	Quasi Peak	-27.76

Page 2 of 2

8.1.77 512MHz, 200 MHz to 1000 MHz, Horizontal Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:23

Test Spec CISPR 22 Radiated Disturbances

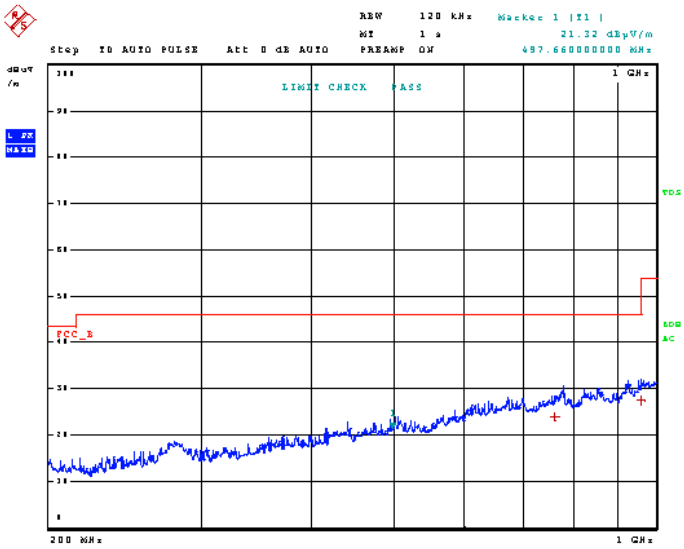
Polarity

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



8.1.78 512MHz, 200 MHz to 1000 MHz, Horizontal Polarity Table

30.Dec 20 10:23

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	764.180000000 MHz	24.14	Quasi Peak	-21.86
1	958.970000000 MHz	27.44	Quasi Peak	-18.56

Page 2 of 2

8.1.79 512MHz, 200 MHz to 1000 MHz, Vertical Polarity Plot

ROHDE&SCHWARZ

30.Dec 20 10:23

Test Spec CISPR 22 Radiated Disturbances

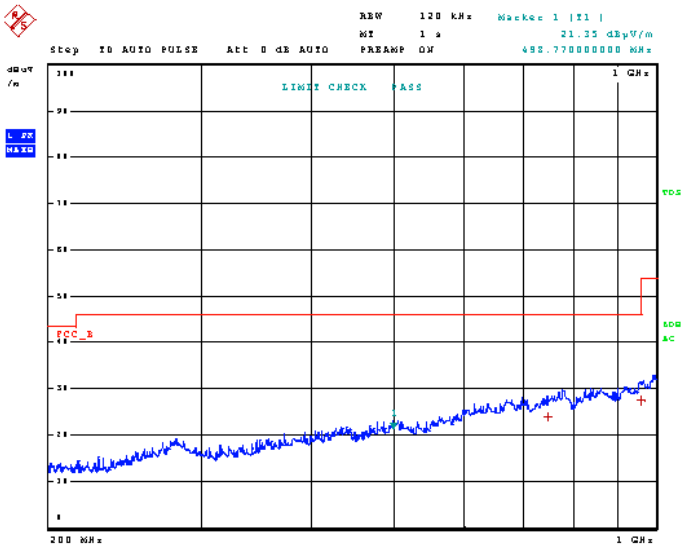
Polarity

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



Page 1 of 2

8.1.80 512MHz, 200 MHz to 1000 MHz, Vertical Polarity Table

30.Dec 20 10:23

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	751.880000000 MHz	24.12	Quasi Peak	-21.88
1	958.700000000 MHz	27.42	Quasi Peak	-18.58

Page 2 of 2

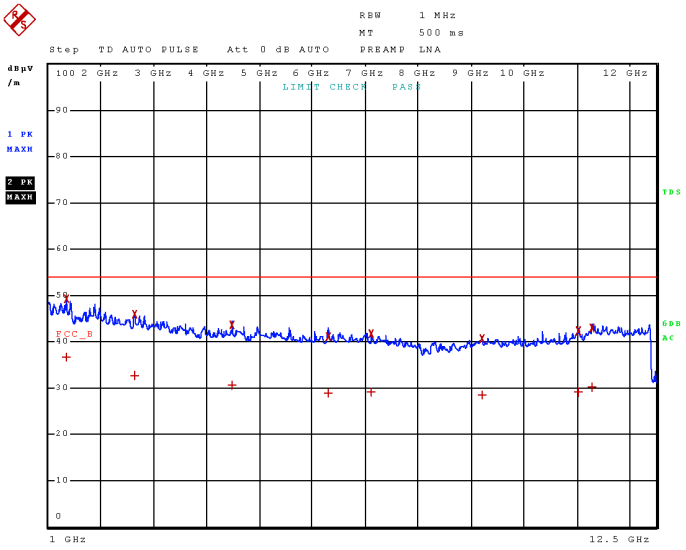
8.1.81 512MHz, above 1000 MHz, Horizontal Polarity Plot

30.Dec 20 09:08

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_05

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



8.1.82 512MHz, above 1000 MHz, Horizontal Polarity Table

30.Dec 20 09:08

Final Measurement

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

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.329250000 GHz	36.63	CISPR Averag	-17.37
2	1.329250000 GHz	49.26	Max Peak	
1	2.624000000 GHz	32.68	CISPR Averag	-21.32
2	2.624000000 GHz	45.82	Max Peak	
1	4.461750000 GHz	30.64	CISPR Averag	-23.36
2	4.461750000 GHz	43.63	Max Peak	
1	6.288000000 GHz	28.88	CISPR Averag	-25.12
2	6.288000000 GHz	40.98	Max Peak	
1	7.103250000 GHz	29.20	CISPR Averag	-24.80
2	7.103250000 GHz	41.69	Max Peak	
1	9.199750000 GHz	28.39	CISPR Averag	-25.61
2	9.199750000 GHz	40.63	Max Peak	
1	11.032250000 GHz	29.04	CISPR Averag	-24.96
2	11.032250000 GHz	42.43	Max Peak	
1	11.279750000 GHz	30.10	CISPR Averag	-23.90
2	11.279750000 GHz	42.89	Max Peak	

Page 2 of 2

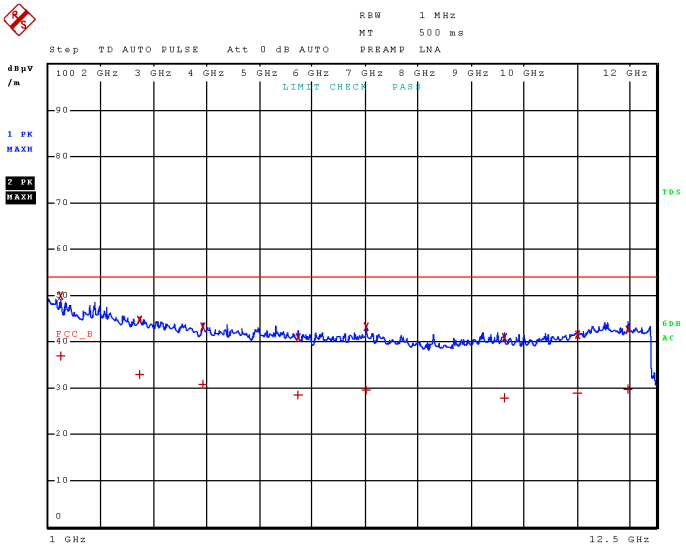
8.1.83 512MHz, above 1000 MHz, Vertical Polarity Plot

30.Dec 20 09:09

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_05

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



8.1.84 512MHz, above 1000 MHz, Vertical Polarity Table

30.Dec 20 09:09

Final Measurement

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

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	1.216250000 GHz	36.83	CISPR Averag	-17.17
2	1.216250000 GHz	49.97	Max Peak	
1	2.715250000 GHz	32.91	CISPR Averag	-21.09
2	2.715250000 GHz	44.73	Max Peak	
1	3.917750000 GHz	30.77	CISPR Averag	-23.23
2	3.917750000 GHz	43.24	Max Peak	
1	5.718000000 GHz	28.50	CISPR Averag	-25.50
2	5.718000000 GHz	40.83	Max Peak	
1	7.013750000 GHz	29.49	CISPR Averag	-24.51
2	7.013750000 GHz	43.15	Max Peak	
1	9.620000000 GHz	27.92	CISPR Averag	-26.08
2	9.620000000 GHz	40.88	Max Peak	
1	11.016000000 GHz	28.96	CISPR Averag	-25.04
2	11.016000000 GHz	41.56	Max Peak	
1	11.967000000 GHz	29.77	CISPR Averag	-24.23
2	11.967000000 GHz	42.63	Max Peak	

Page 2 of 2

9. ANNEX-A - Photographs of the EUT

Photographs of the EUT and any manufacturer supplied accessories to be used with the EUT are in a separate document.

10. ANNEX-B – Test Setup Photographs

Test setup photographs are located in a separate document.

11. History of Test Report Changes

Test Report #	Revision #	Description	Date of Issue
TR_4955-20_FCC_15B_Scanning Reciever_1	1	Initial release	12/21/2020
	2	Revised Page 5	1/19/2021

END OF TEST REPORT