ROHDE&SCHWARZ

CALIBRATION CERTIFICATE

Kalibrierschein

Certificate Number
Zertifikatsnummer

1020A300773182

DAkkS Deutsche Akkreditierungsstelle D-K-15195-01-00

General Data

Item Gegenstand	ESW8 EMI TEST RECEIVER		
Manufacturer Hersteller	ROHDE & SCHWARZ		
Type Typ	ESW8		
Material Number Materialnummer	1328.4100K08	**Serial Number** Seriennummer	101344
Order Number Bestellnummer	8800067353 10, 312025496	**Asset Number** Inventarnummer	
Customer Auftraggeber	Exporta s.r.o. Patockova 1434/51 160 00 Praha 6 CZ		

Performance

Place and Date of Calibration Ort und Datum der Kalibrierung	87700 Memmingen, Rohde-und-Schwarz-Str. 1 2024-12-02
Statement of Compliance (Incoming) Konformitätsaussage (Anlieferung)	One or more measured values are outside the data sheet specifications, marked as FAIL.
Statement of Compliance (Outgoing) Konformitätsaussage (Auslieferung)	All measured values are within the data sheet specifications.
Customers due Interval Kalibrierintervall des Kunden	
Extent of Calibration Document Umfang des Kalibrierdokuments	3 Pages Certificate 82 Pages Outgoing Results 82 Pages Incoming Results

Date of Issue Ausstellungsdatum	**Approval of the certificate by** Freigabe des Kalibrierscheins durch	
2024-12-02	Dr. Gerhard Rösel	Danuta Wach
	Laboratory Management Labormanagement	**Person in Charge** Bearbeiter

Calibration Mark
Kalibrierzeichen

300773182
D-K-15195-01-00
2024-12

Member of Deutscher Kalibrierdienst
Mitglied im Deutschen Kalibrierdienst

DKD

This calibration certificate documents the metrological traceability to national standards, which realize the units of measurement according to the International System of Units (SI). The DAkkS is signatory to the multilateral agreements of the European co-operation for Accreditation (EA) and of the International Laboratory Accreditation Cooperation (ILAC) for the mutual recognition of calibration certificates. The user is obliged to have the object recalibrated at appropriate intervals. This calibration certificate may not be reproduced other than in full except with the permission of the issuing laboratory. Calibration certificates with the full name of the approval responsible person are valid without signature.

Dieser Kalibrierschein dokumentiert die metrologische Rückführbarkeit auf nationale Normale zur Darstellung der Einheiten in Übereinstimmung mit dem Internationalen Einheitensystem (SI). Die DAkkS ist Unterzeichner der multilateralen Übereinkommen der European cooperation for Accreditation (EA) und der International Laboratory Accreditation Cooperation (ILAC) zur gegenseitigen Anerkennung der Kalibrierscheine.
Für die Einhaltung einer angemessenen Frist zur Wiederholung der Kalibrierung ist der Benutzer verantwortlich.
Dieser Kalibrierschein darf nur vollständig weiterverbreitet werden. Auszüge oder Änderungen bedürfen der Genehmigung des ausstellenden Kalibrierlaboratoriums. Kalibrierscheine sind bei Nennung des für die Freigabe Verantwortlichen in Klarschrift auch ohne Unterschrift gültig.

Calibration Procedure

The calibration of the object can be classified as a direct measurement. Frequency was compared using a GPS synchronized rubidium oscillator. RF power was measured with a power standard. Linearity was compared with a precision step attenuator. Reflection was measured using a Vector Network Analyzer, calibrated with a calibration kit. CISPR detectors were measured using either a CISPR Pulse Generator or a pulsed RF generator. The calibrations and measurements follow the guideline VDI/VDE/DGQ/DKD 2622 Part 12 (2004-06).
The traceability is represented in the table Working Standards used.
This calibration fulfils the requirements of the standards IEC CISPR 16-1-1:2010 + AMD1:2010 + AMD2:2014 (Ed. 3.2), CISPR 16-1-1:2015 (Ed. 4.0), CISPR 16-1-1:2019 (Ed. 5.0) and ANSI C63.2-2016, ANSI C63.2-2023.

Working Standards used

Item	Type	Serial Number	Calibration Certificate Number	Cal. Due
Standard Frequency System	FREQSTD	100257	0001A1230250	2025-10-31
Calibration Pulse Gen. CISPR16	IGUU2918	196	0001A300739966	2025-09-30
Low Phase Noise Reference	LPNR100	101545	0001A300730526	2025-07-31
RF-Power Linearity Standard	NRPC-LS	100954	0001A300730528	2025-07-31
Average Power Sensor 8kHz-18GH	NRP18A	101454	0001A300730560	2025-07-31
Average Power Sensor 8kHz-18GH	NRP18A	101471	0001A300730557	2025-07-31
Thermal Power Sensor 18GHz	NRP18T	102357	0001A300748251	2025-11-30
Thermal Power Sensor	NRP40T	101377	0001A300730563	2025-07-31
Thermal Power Sensor 50 GHz	NRP50T	101315	0001A300730584	2025-07-31
Step Attenuator 139dB 6GHz	RSC	102575	0001A300730531	2025-07-31
Frequency Multiplier 60-90GHz	SZM90	101113	0001A1220667	2026-02-28
UCS Power Standard 70 GHz	UCS70GHZPS	101001	0001A300751191	2025-12-31
Directional Coupler 0,03-35MHz	ZFDC-15-6-N+	101156	0001A300756124	2026-01-31
Vector Network Analyzer 2 Port	ZNB40	101820	0001A300756509	2026-01-31
Calibration-Kit 2.4 mm	ZN-Z224	101547	0001A300723514	2025-06-30
Calibration Kit 2,92mm	ZN-Z229	101230	0001A300730605	2025-07-31
Calibration Kit 18GHz N-Typ	ZV-Z270	101297	0001A300730606	2025-07-31
Digital Multimeter 8 1/2 Digit	3458A	MY45054719	11A300751274	2026-01-31

Remarks

The certificate number formatted 0001A300773182 corresponds to format 1020A300773182, because of formal changes.

Environmental Conditions			
Ambient Temperature	(23 ± 3) °C	**Relative Humidity**	20%-70%

Comments on Measurement Results

The reported results apply only to those items specifically listed on this calibration certificate and have been tested for compliance with the specifications. The associated uncertainty of measurement has been taken into account if not otherwise stated.
The non-binary decision rule with guard band is used according to ILAC G8:09/2019 ‘Guidelines on Decision Rules and Statements of Conformity’. Pass is normally not marked. Conditional Pass is marked with UGB1, Conditional Fail with UGB2 and Fail with Fail.

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor (k=2) such that the coverage probability corresponds to approximately 95 %. It is consistent with the EA-4/02 M:2022.

In addition to the calibration results, the calibration certificate includes functional measurements that might have an influence on the measurement uncertainty of the calibration results.
The functional measurement results are marked and are not intended to be used to support the further dissemination of metrological traceability. They are intended to verify the requirements on the measurement object according to manufacturer specifications and technical standards.

Outgoing Results

Designation:	**EMI Test Receiver**
Type:	**ESW-8**
Material No.:	**1328.4100K08**
Serial No.:	**101344**
Certificate No.:	**1020A300773182**
Referring to Test Documentation:	**1328.4100.01-PB-01.29** **1328.3749.00-PB-06.00** **1338.2322.00-PB-03.10**

Test Department:	**3MES2**
Name:	**See certificate**
Date:	**2024-12-02**

The following abbreviations may be used in this document

{a}	No measurement uncertainty stated because the errors always add together. So it is sure that a measurement result evaluated as "PASS" is pass.
{b}	The measurement uncertainty depends on the measurement result. The stated measurement uncertainty is valid for the close area around the specification. Measurement results outside the close area have a higher measurement uncertainty but are within the specification.
{c}	Functional test, therefore no measurement uncertainty is stated.
{d}	Typical value, refer to performance test.
{e}	The measurement uncertainty is taken into account when setting the measuring system.
{g}	Verification of specified requirements, non-accredited measurements. Technical operations that consist of the determination of one or more characteristics to a specified procedure (formerly {f}).
DL or DT	Data Limit for symmetrical tolerance limits
DLL	Datasheet Lower Limit
DUL	Datasheet Upper Limit
MU	Symmetrical Measurement Uncertainty
MLL or MLV	Measurement Uncertainty Lower Value
MUL or MUV	Measurement Uncertainty Upper Value
Nom.	Nominal Value
Dev.	Deviation
Act.	Actual Value
UGB	Uncertainty Guard Band: Measuring uncertainty violates the data (spec.) limit.
UGB1	A compliance statement may be possible where a confidence level of less than 95 % is acceptable.
UGB2	A non-compliance statement may be possible where a confidence level of less than 95 % is acceptable.
DU	Datasheet Uncertainty

Explanation of charts

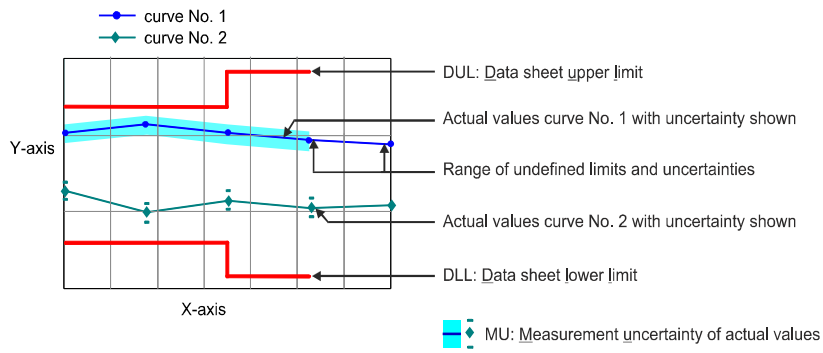


Table of contents

Software used for measurement			
Item	**Type**	**Version**	**Remark**
7010.2181.00_ESW.G5Lim	Limit File	2023-03-02 10:22	
Suite	Setup	V12.49.07	Test Management Software G5
Test Program (7010.2181.00)	Component	V01.15.11	

1. General function tests

Selftest successful	pass	pass
Self Alignment successful	pass	pass

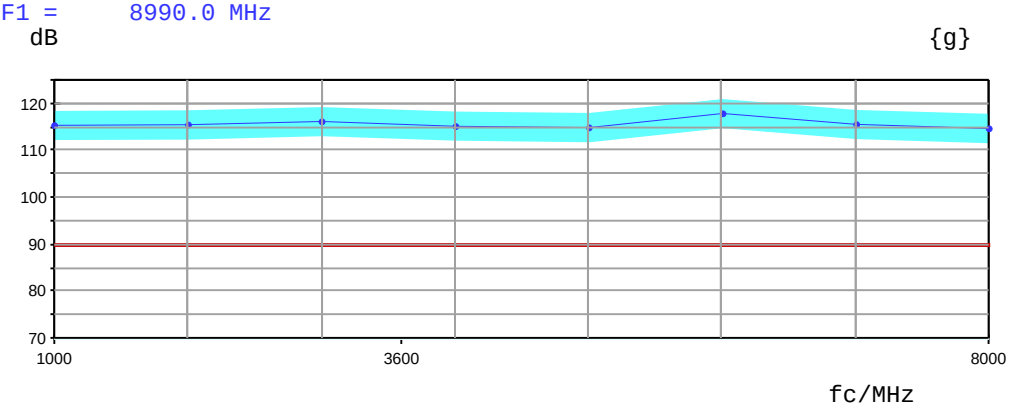
2. Checking the reference frequency uncertainty

	DUL	DLL	Actual	MU
Error of internal 10 MHz	1.00 Hz..	-1.00 Hz	+0.0100 Hz	0.0120 Hz

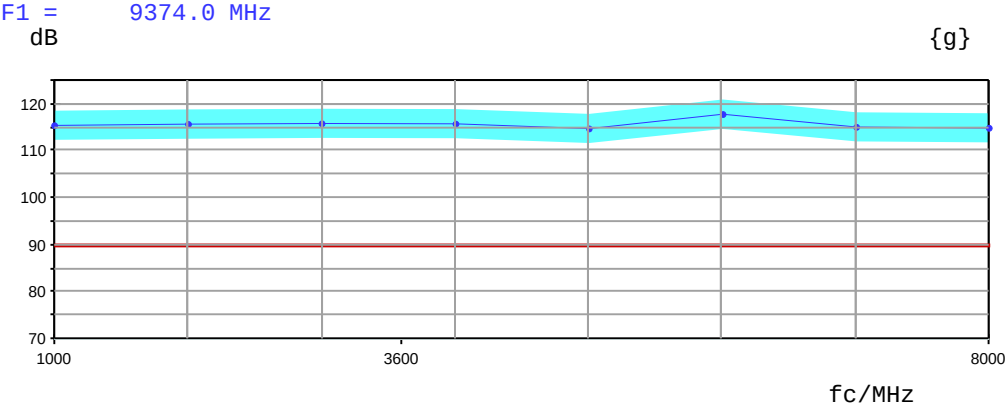
3. Immunity to interference

3.1 1st IF Image Frequency Rejection

IF1 = 8990.0 MHz

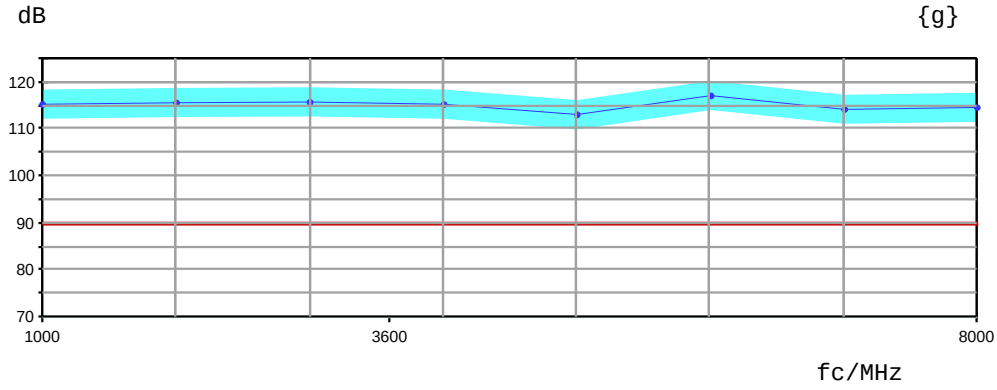


IF1 = 9374.0 MHz

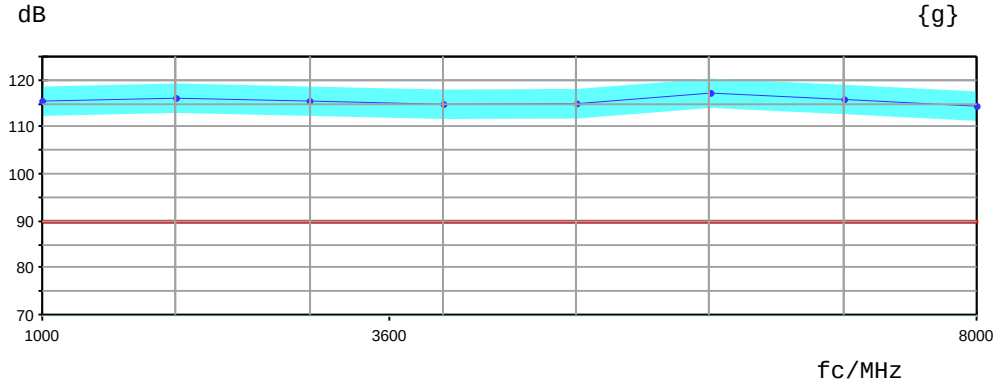


3.2 1st IF Rejection

IF1 = 8990.0 MHz



IF1 = 9374.0 MHz



3.3 2nd IF Image Frequency Rejection

IF2 = 1317.0 MHz

fc	DLL	Actual	MU {g}
1000.0 MHz	90 dB	112.7 dB	3.1 dB

3.4 3rd IF Image Frequency Rejection

IF3 = 37.0 MHz

fc	DLL	Actual	MU {g}
63.0 MHz	90 dB	112.4 dB	3.1 dB
100.0 MHz	90 dB	113.3 dB	3.1 dB
900.0 MHz	90 dB	112.3 dB	3.1 dB
1100.0 MHz	90 dB	115.5 dB	3.1 dB
7990.0 MHz	90 dB	114.5 dB	3.1 dB

3.5 2nd IF Rejection

IF2 = 1317.0 MHz

fc	DLL	Actual	MU {g}
50.0 MHz	90 dB	113.7 dB	3.1 dB
200.0 MHz	90 dB	114.2 dB	3.1 dB
500.0 MHz	90 dB	112.5 dB	3.1 dB
900.0 MHz	90 dB	113.0 dB	3.1 dB
1100.0 MHz	90 dB	115.2 dB	3.1 dB
7990.0 MHz	90 dB	114.2 dB	3.1 dB

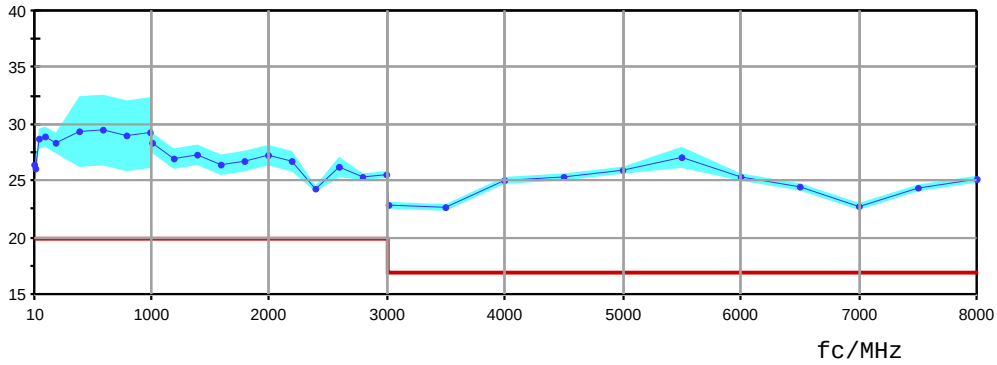
3.6 3rd IF Rejection

IF3 = 37.0 MHz

fc	DLL	Actual	MU {g}
100.0 MHz	90 dB	98.5 dB	0.8 dB
200.0 MHz	90 dB	114.4 dB	3.1 dB
500.0 MHz	90 dB	112.6 dB	3.1 dB
900.0 MHz	90 dB	112.6 dB	3.1 dB
1100.0 MHz	90 dB	116.3 dB	3.1 dB
7990.0 MHz	90 dB	114.5 dB	3.1 dB

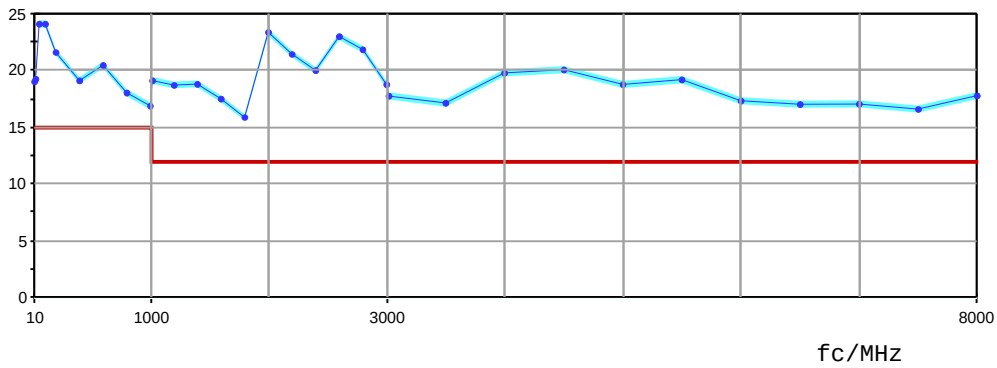
4. Third-order intercept point (TOI)

T.O.I/dBm {g}



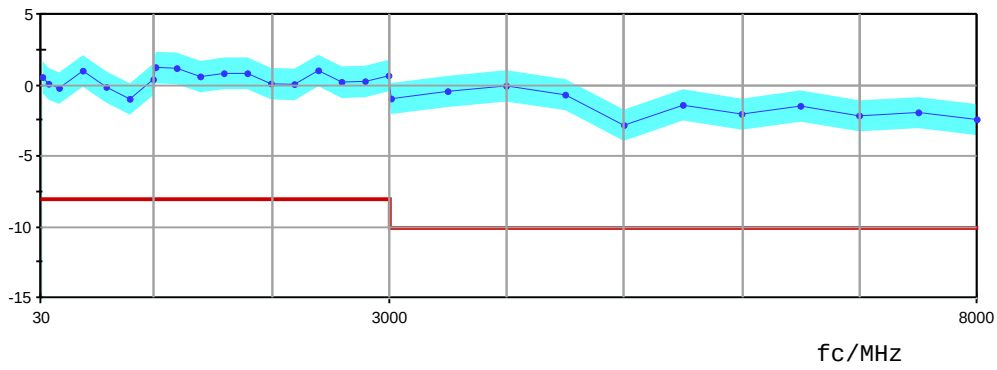
5. Third-order intercept point (TOI) with preselector

T.O.I/dBm {g}



6. Third-order intercept point (TOI) with preselector and preamplifier

T.O.I/dBm {g}



7. Second harmonic intercept (SHI)

fin	DLL	Actual	MU {g}
9.0 MHz	50.0 dBm	93.7 dBm	1.5 dB
21.0 MHz	50.0 dBm	71.3 dBm	0.6 dB
106.0 MHz	50.0 dBm	64.4 dBm	0.6 dB
274.0 MHz	50.0 dBm	62.8 dBm	0.6 dB
449.9 MHz	70.0 dBm	104.4dBm	1.5 dB
699.9 MHz	47.0 dBm	85.0 dBm	1.5 dB
999.9 MHz	47.0 dBm	76.2 dBm	0.6 dB
1499.9 MHz	47.0 dBm	95.8 dBm	1.5 dB
1749.9 MHz	62.0 dBm	93.5 dBm	1.5 dB
2699.9 MHz	62.0 dBm	79.4 dBm	0.6 dB
3449.9 MHz	62.0 dBm	81.1 dBm	1.5 dB

8. IF Filters

8.1 Bandwidth switching level uncertainty

RBW (3dB)
reference is 10.0 kHz RBW

Bandwidth	DL	Actual	MU
10.0 MHz	0.1 dB	0.00 dB	0.01 dB
1.0 MHz	0.1 dB	0.00 dB	0.01 dB
100 kHz	0.1 dB	0.00 dB	0.01 dB
10 kHz	0.1 dB	0.00 dB	0.01 dB
1 kHz	0.1 dB	-0.01 dB	0.01 dB
100 Hz	0.1 dB	-0.02 dB	0.01 dB

8.2 Bandwidth uncertainty

10.0 MHz	+3 % .. -3 %	-1.10 %	0.35 %
1.0 MHz	+3 % .. -3 %	0.70 %	0.36 %
100 kHz	+3 % .. -3 %	0.70 %	0.36 %
10 kHz	+3 % .. -3 %	0.70 %	0.36 %
1 kHz	+3 % .. -3 %	0.70 %	0.36 %
100 Hz	+3 % .. -3 %	0.70 %	0.36 %

8.3 Shape factor 60 dB : 3 dB

		DUL	Actual	MU
10.0 MHz	shapefactor	5	4.25	0.35 %
1.0 MHz	shapefactor	5	3.96	0.36 %
100 kHz	shapefactor	5	3.96	0.36 %
10 kHz	shapefactor	5	3.96	0.36 %
1 kHz	shapefactor	5	3.97	0.36 %
100 Hz	shapefactor	5	3.96	0.36 %

9. IF Filters (EMI filters)

9.1 Bandwidth switching level uncertainty

RBW (6dB)
reference is 10.0 kHz RBW (normal, 3dB)

Bandwidth	DL	Actual	MU
1 MHz	0.1 dB	0.00 dB	0.01 dB
120 kHz	0.1 dB	0.00 dB	0.01 dB
100 kHz	0.1 dB	0.00 dB	0.01 dB
10 kHz	0.1 dB	0.00 dB	0.01 dB
9 kHz	0.1 dB	0.00 dB	0.01 dB
1 kHz	0.1 dB	0.00 dB	0.01 dB
200 Hz	0.1 dB	0.00 dB	0.01 dB
100 Hz	0.1 dB	-0.01 dB	0.01 dB
10 Hz	0.1 dB	-0.02 dB	0.01 dB

9.2 Bandwidth uncertainty

1 MHz	+3 % .. -3 %	-0.5 %	0.92 %
120 kHz	+3 % .. -3 %	-0.5 %	0.92 %
100 kHz	+3 % .. -3 %	-0.5 %	0.20 %
10 kHz	+3 % .. -3 %	-0.5 %	0.20 %
9 kHz	+3 % .. -3 %	-0.5 %	0.18 %
1 kHz	+3 % .. -3 %	-0.5 %	0.17 %
200 Hz	+3 % .. -3 %	-0.2 %	0.20 %
100 Hz	+3 % .. -3 %	-0.8 %	0.18 %
10 Hz	+3 % .. -3 %	0.1 %	0.17 %

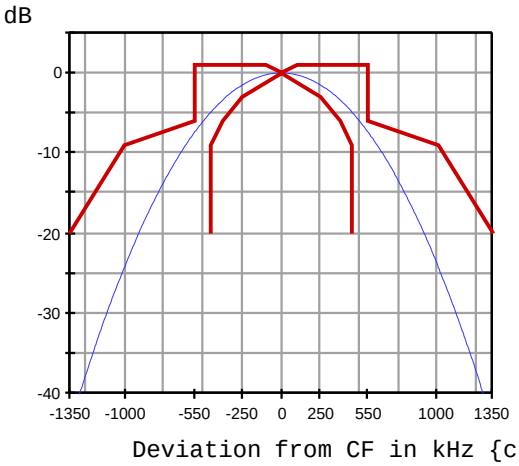
9.3 Shape factor 60 dB : 6 dB

		DUL	Actual	MU
1000 kHz	shapefactor	4	2.8	0.93 %
120 kHz	shapefactor	4	2.8	0.93 %
100 kHz	shapefactor	4	2.8	0.20 %
10 kHz	shapefactor	4	2.8	0.20 %
9 kHz	shapefactor	4	2.8	0.18 %
1 kHz	shapefactor	4	2.8	0.17 %
200 Hz	shapefactor	4	2.8	0.20 %
100 Hz	shapefactor	4	2.8	0.18 %
10 Hz	shapefactor	4	2.8	0.17 %

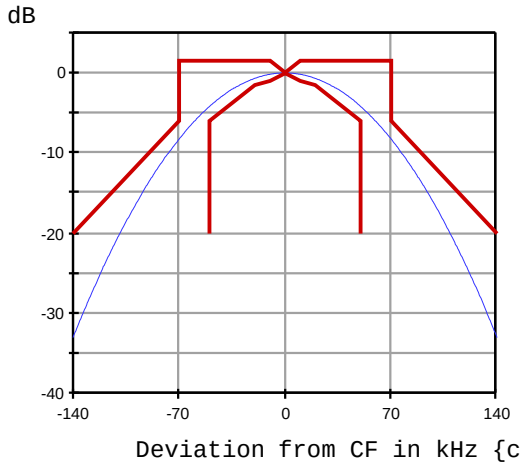
9.4 Overall selectivity

DUT setting: Center Frequency nominal = 64 MHz

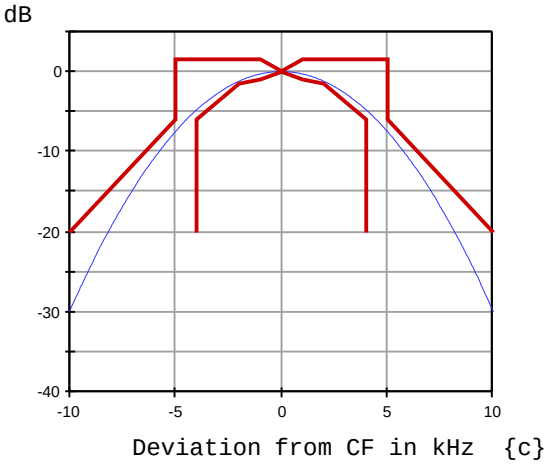
RBW 1MHz



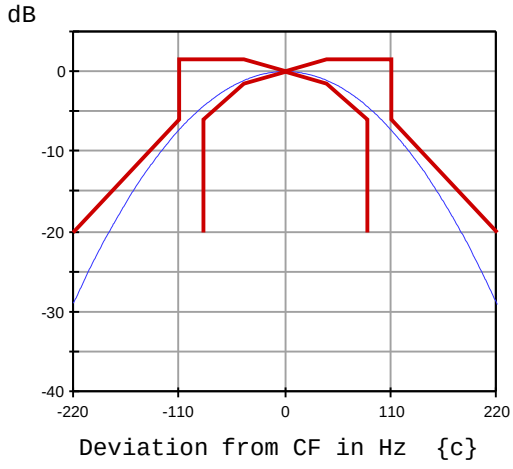
RBW 120 kHz



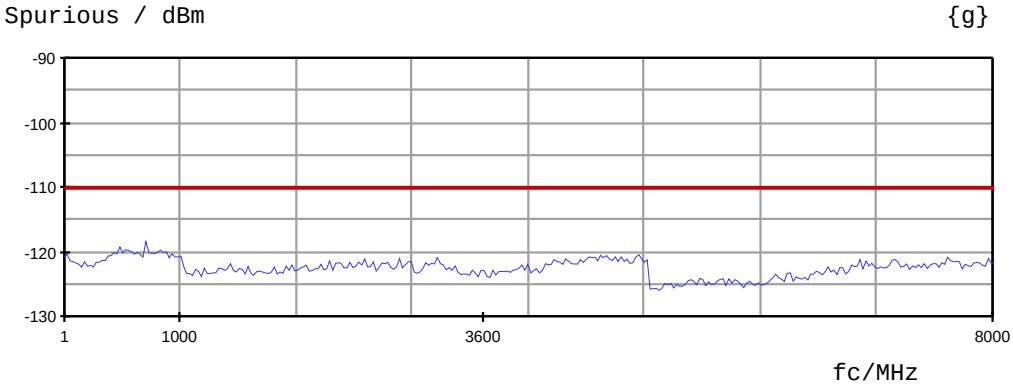
RBW 9 kHz



RBW 200 Hz



10. Spurious response 1 MHz.. 8.0 GHz



Spurious response 1 MHz.. 1.0 GHz, Input 2, Limiter OFF PASS

Spurious response 1 MHz.. 1.0 GHz, Input 2, Limiter ON PASS

11. Checking Noise Correction

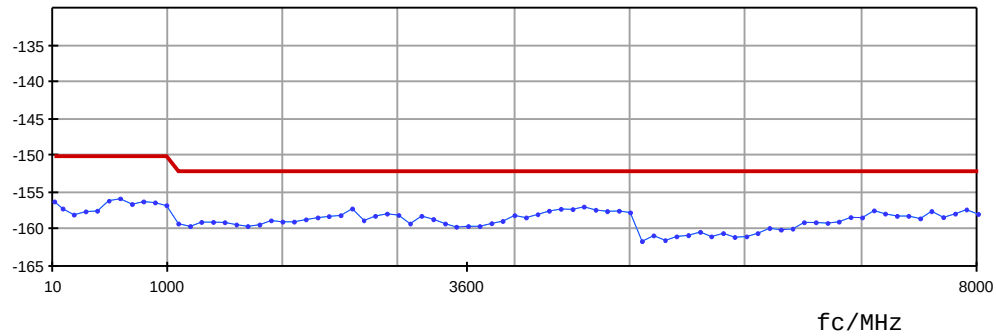
Receiver noise indication function test PASS

12. Noise Display (DANL)

fc		DUL	Actual	MU {g}
2 Hz	(1 Hz BW)	-100 dBm	-106.55 dBm	0.01 dB
10 Hz	(1 Hz BW)	-110 dBm	-124.64 dBm	0.01 dB
30 Hz	(1 Hz BW)	-110 dBm	-131.47 dBm	0.01 dB
90 Hz	(1 Hz BW)	-110 dBm	-138.95 dBm	0.01 dB
300 Hz	(1 Hz BW)	-120 dBm	-136.89 dBm	0.01 dB
980 Hz	(1 Hz BW)	-120 dBm	-142.45 dBm	0.01 dB

fc		DUL	Actual	MU {g}
9.8 kHz	(1 Hz BW)	-145 dBm	-147.83 dBm	0.01 dB
98 kHz	(1 Hz BW)	-145 dBm	-153.24 dBm	0.01 dB
998 kHz	(1 Hz BW)	-145 dBm	-155.78 dBm	0.01 dB
9800 kHz	(1 Hz BW)	-150 dBm	-157.03 dBm	0.01 dB

DANL / dBm normalized to 1 Hz RBW {g}

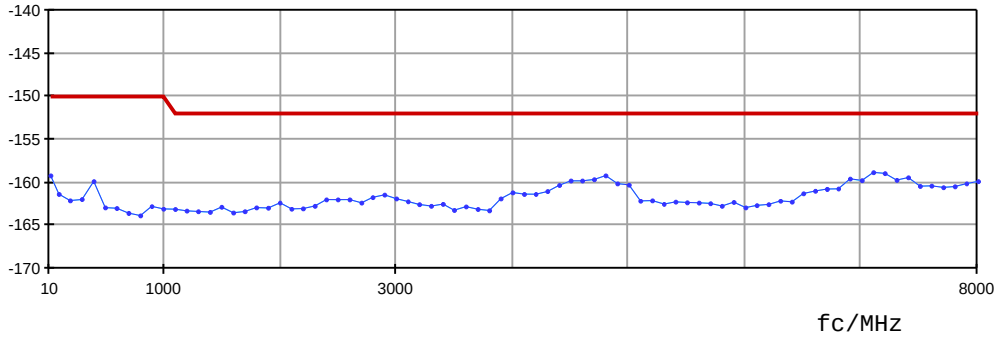


13. Noise Display (DANL) with preselector on

fc		DUL	Actual	MU {g}
2 Hz	(1 Hz BW)	-100 dBm	-119.16 dBm	0.01 dB
10 Hz	(1 Hz BW)	-110 dBm	-130.45 dBm	0.01 dB
30 Hz	(1 Hz BW)	-110 dBm	-137.52 dBm	0.01 dB
90 Hz	(1 Hz BW)	-110 dBm	-141.95 dBm	0.01 dB
300 Hz	(1 Hz BW)	-120 dBm	-146.60 dBm	0.01 dB
980 Hz	(1 Hz BW)	-120 dBm	-150.26 dBm	0.01 dB

fc		DUL	Actual	MU {g}
9.8 kHz	(1 Hz BW)	-145 dBm	-156.79 dBm	0.01 dB
98 kHz	(1 Hz BW)	-145 dBm	-161.02 dBm	0.01 dB
998 kHz	(1 Hz BW)	-145 dBm	-160.81 dBm	0.01 dB
9800 kHz	(1 Hz BW)	-150 dBm	-159.71 dBm	0.01 dB

DANL / dBm normalized to 1 Hz RBW {g}

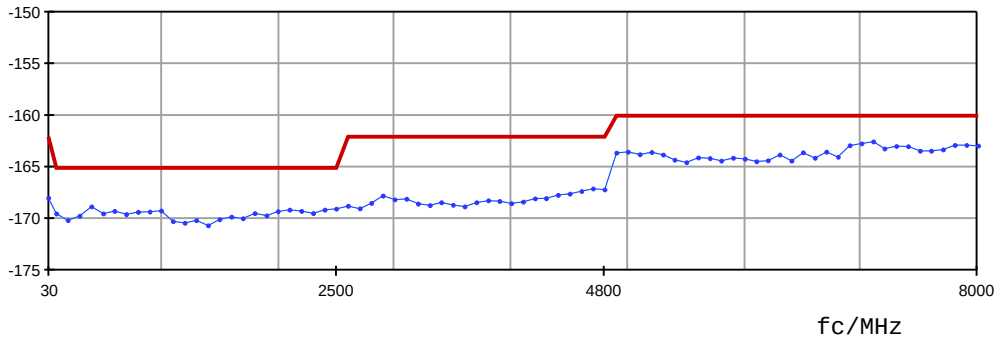


14. Noise Display (DANL) with preselector on and preamplifier on

fc		DUL	Actual	MU {g}
1020 Hz	(1 Hz BW)	-140 dBm	-159.13 dBm	0.01 dB

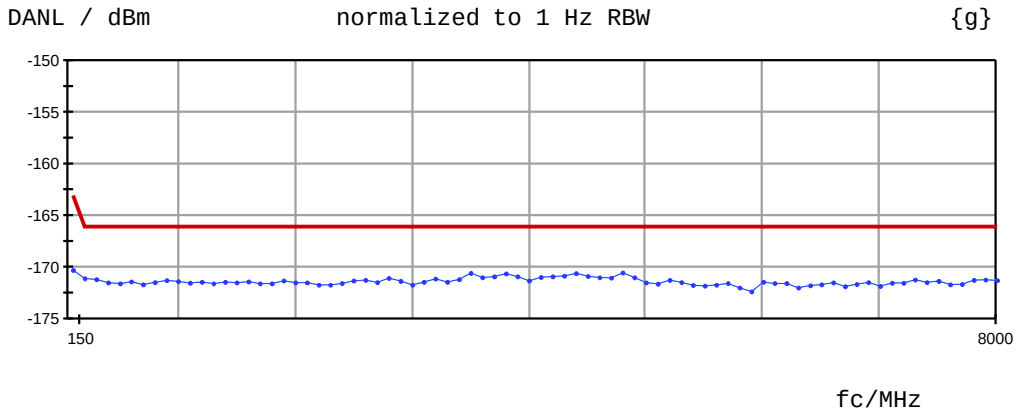
fc		DUL	Actual	MU {g}
9.8 kHz	(1 Hz BW)	-155 dBm	-167.67 dBm	0.01 dB
98 kHz	(1 Hz BW)	-155 dBm	-167.67 dBm	0.01 dB
998 kHz	(1 Hz BW)	-155 dBm	-166.03 dBm	0.01 dB
9800 kHz	(1 Hz BW)	-162 dBm	-163.74 dBm	0.01 dB

DANL / dBm normalized to 1 Hz RBW {g}



15. Noise Display (DANL) with LN preamplifier on (ESW-B24)

fc		DUL	Actual	MU {g}
150 kHz	(1 Hz BW)	-130 dBm	-138.09 dBm	0.01 dB
998 kHz	(1 Hz BW)	-130 dBm	-145.60 dBm	0.01 dB
50 MHz	(1 Hz BW)	-150 dBm	-168.80 dBm	0.01 dB



16. Absolute level uncertainty at 64 MHz

16.1 Input1, preselector off, preamplifier off

fc	DL	Actual	MU
64 MHz	0.20 dB	-0.02 dB	0.04 dB

16.2 Input1, preselector on, preamplifier off

fc	DL	Actual	MU
64 MHz	0.35 dB	0.09 dB	0.04 dB

16.3 Input1, preselector on, preamplifier on

fc	DL	Actual	MU
64 MHz	0.35 dB	0.10 dB	0.04 dB

LN preamplifier on

Preselector off

fc	DL	Actual	MU
64 MHz	0.20 dB	0.09 dB	0.04 dB

Preselector on

fc	DL	Actual	MU
64 MHz	0.35 dB	0.09 dB	0.04 dB

17. Absolute level uncertainty at 64 MHz, Input 2

17.1 Input2, preselector off, preamplifier off

fc	DL	Actual	MU
64 MHz	0.20 dB	0.08 dB	0.04 dB

17.2 Input2, preselector on, preamplifier off

fc	DL	Actual	MU
64 MHz	0.35 dB	0.02 dB	0.04 dB

17.3 Input2, preselector on, preamplifier on

fc	DL	Actual	MU
64 MHz	0.35 dB	0.03 dB	0.04 dB

18. Input 2, LN preamplifier on

Preselector off

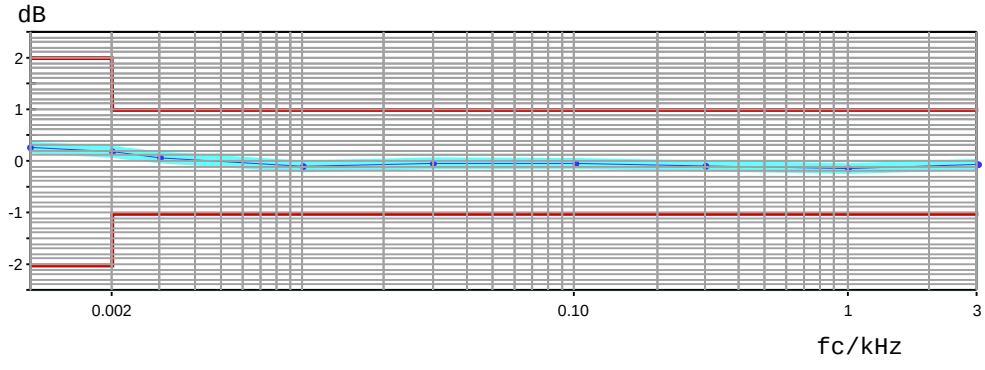
fc	DL	Actual	MU
64 MHz	0.20 dB	0.11 dB	0.04 dB

Preselector on

fc	DL	Actual	MU
64 MHz	0.35 dB	0.05 dB	0.04 dB

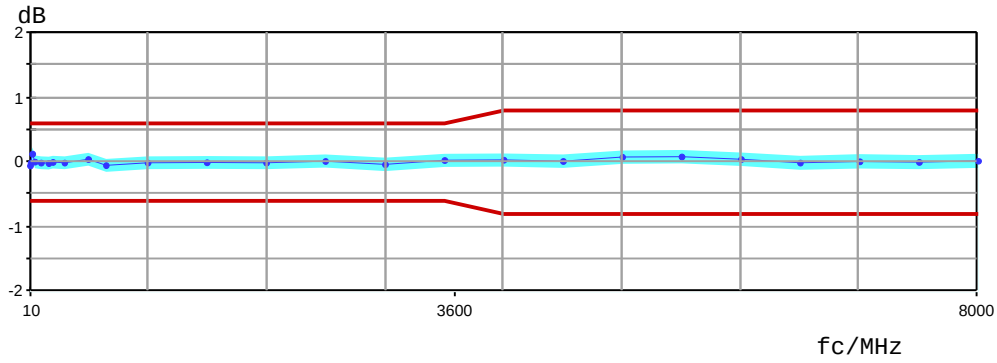
19. Frequency response <9 kHz, Input 1, preselector off, preamplifier off

RF attenuation 10 dB, DC coupled

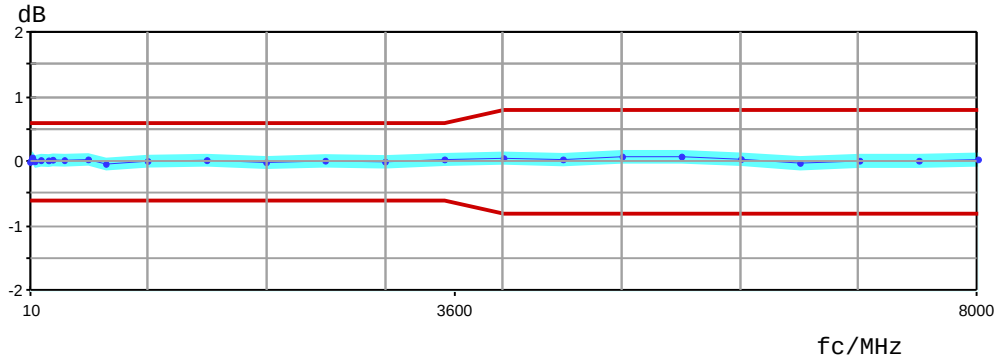


20. Frequency response, Input 1, preselector off, preamplifier off

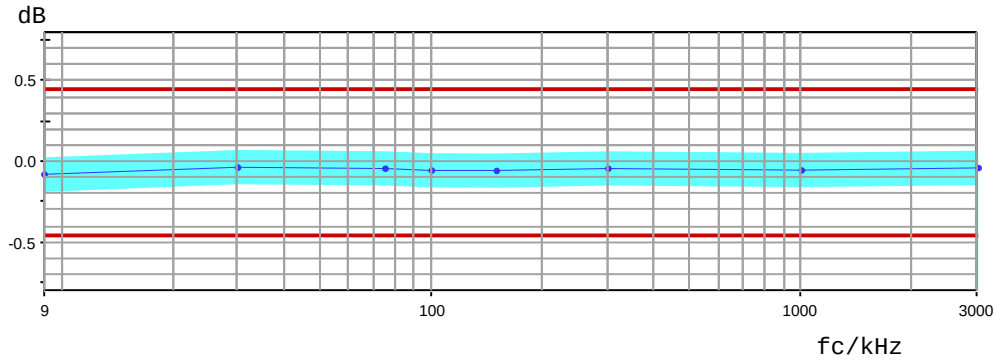
Input 1, RF attenuation 0 dB, AC coupled



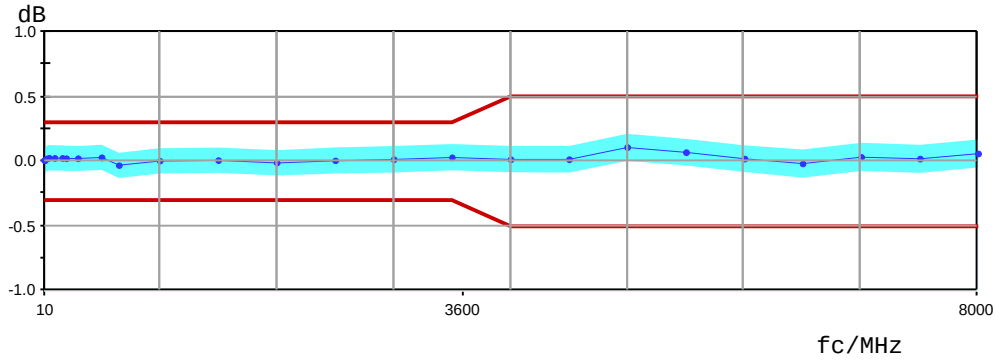
Input 1, RF attenuation 5 dB, AC coupled



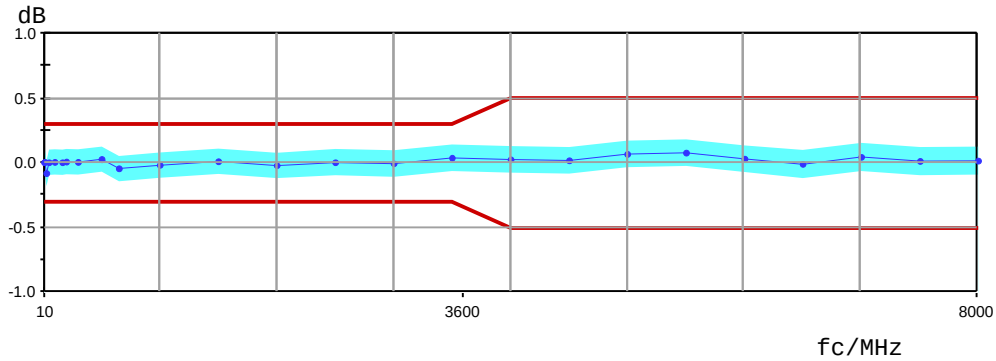
Input 1, RF attenuation 10 dB, DC coupled



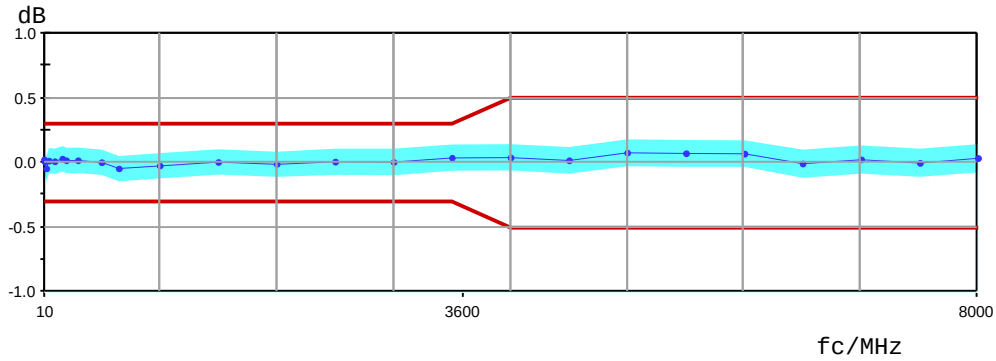
Input 1, RF attenuation 10 dB, AC coupled



Input 1, RF attenuation 20 dB, AC coupled

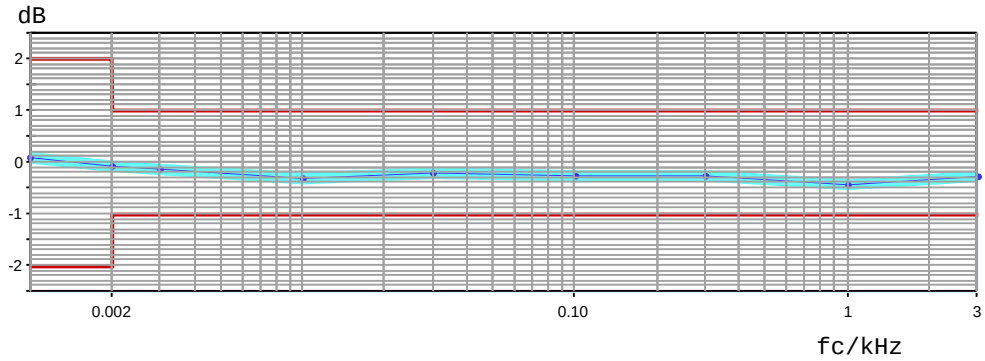


Input 1, RF attenuation 40 dB, AC coupled



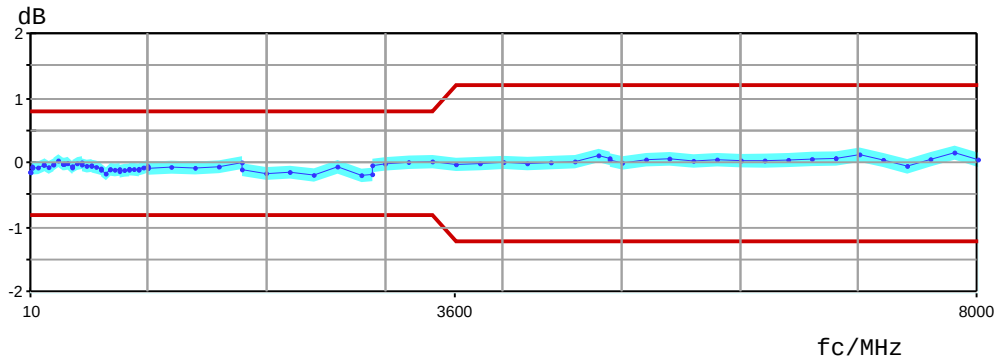
21. Frequency response <9 kHz, Input 1, preselector on, preamplifier off

RF attenuation 10 dB, DC coupled

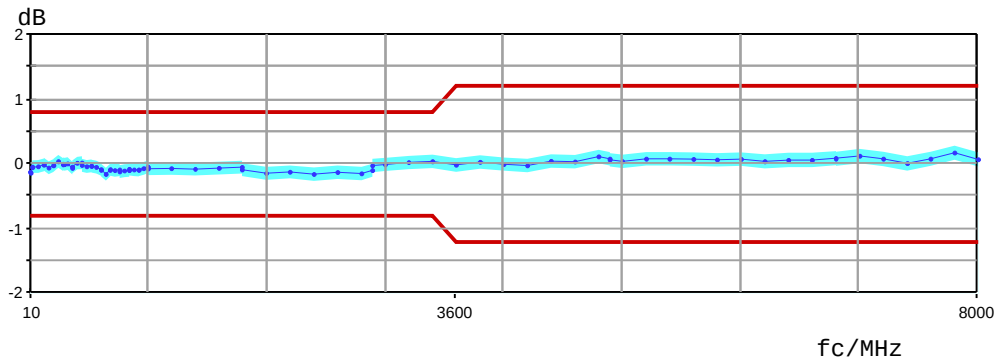


22. Frequency response, Input 1, preselector on, preamplifier off

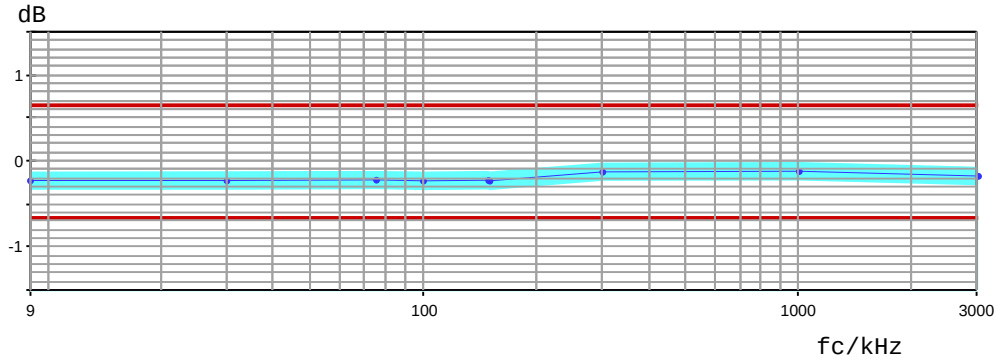
Input 1, preselector on, Preamplifier off, RF attenuation 0 dB, AC coupled



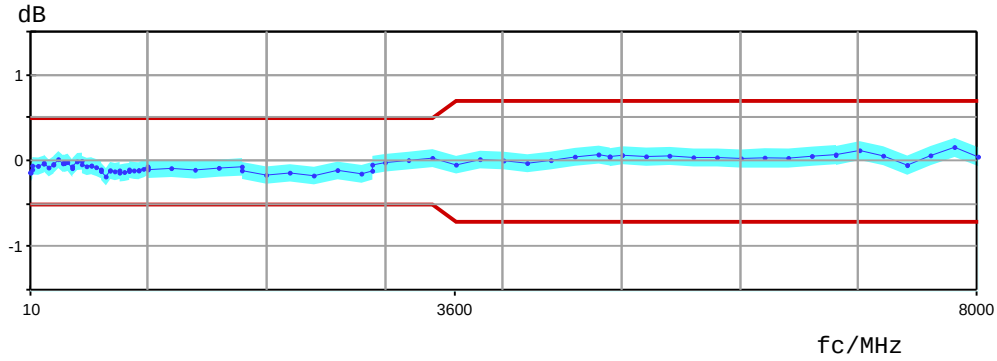
Input 1, preselector on, Preamplifier off, RF attenuation 5 dB, AC coupled



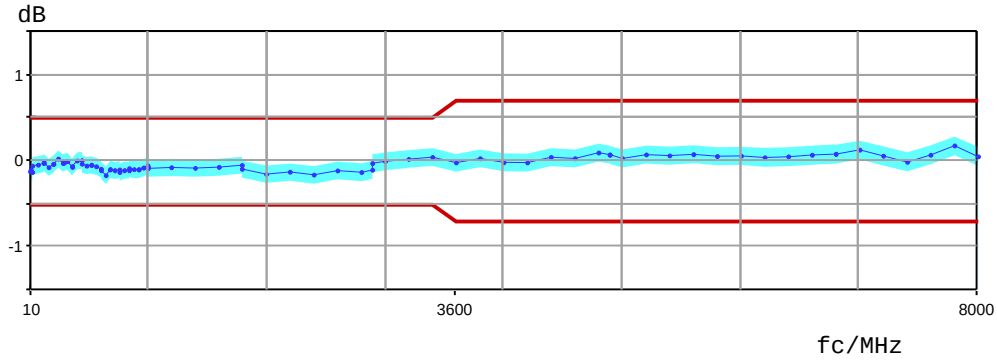
Input 1, preselector on, Preamplifier off, RF attenuation 10 dB, DC coupled



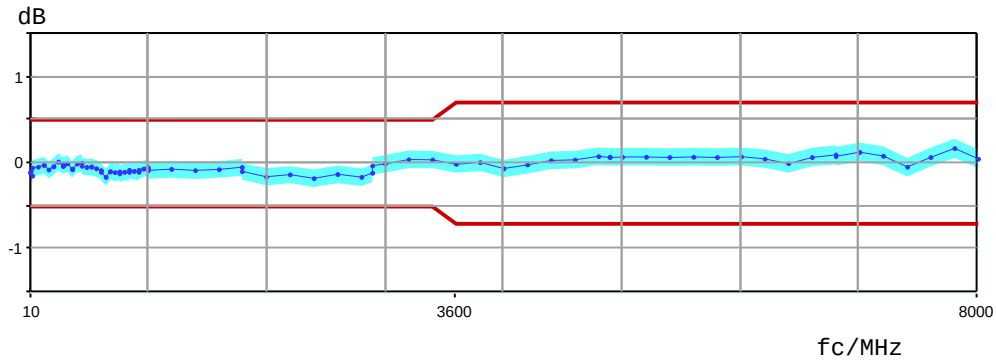
Input 1, preselector on, Preamplifier off, RF attenuation 10 dB, AC coupled



Input 1, preselector on, Preamplifier off, RF attenuation 20 dB, AC coupled



Input 1, preselector on, Preamplifier off, RF attenuation 40 dB, AC coupled



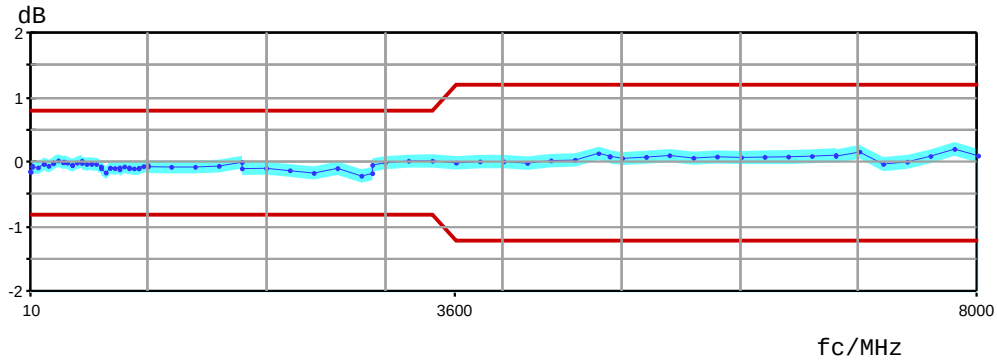
23. Frequency response <9 kHz, Input 1, preselector on, preamplifier on

RF attenuation 10 dB, DC coupled

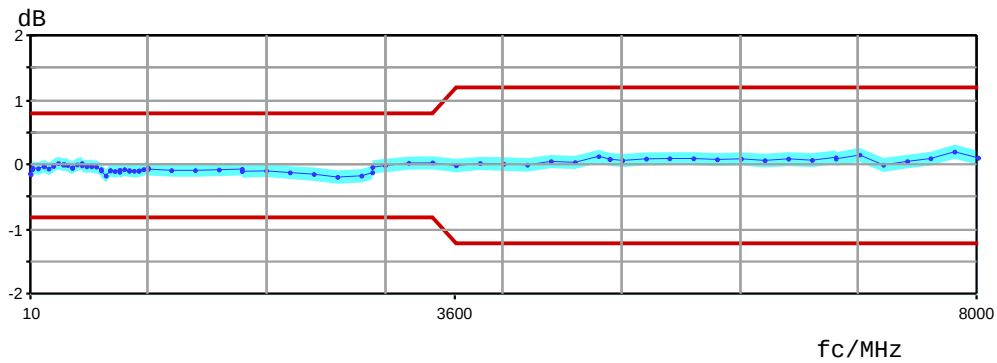
fc	DL	Actual	MU
1.000 kHz	1.00 dB	-0.35 dB	0.11 dB

24. Frequency response, Input 1, preselector on, preamplifier on

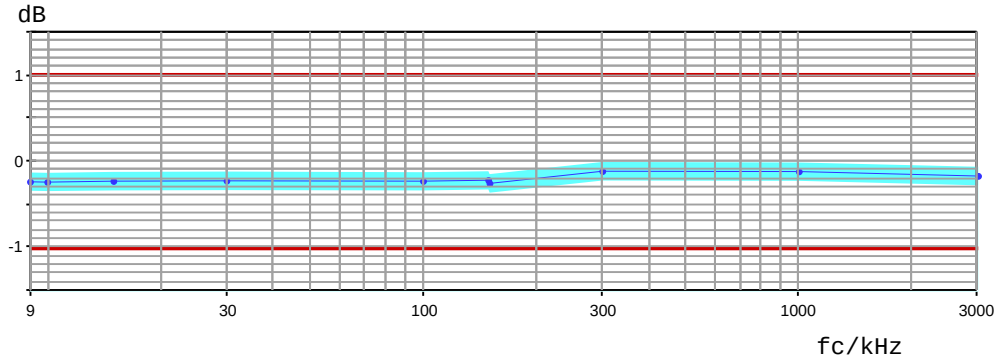
Input 1, preselector on, Preamplifier on, RF attenuation 0 dB, AC coupled



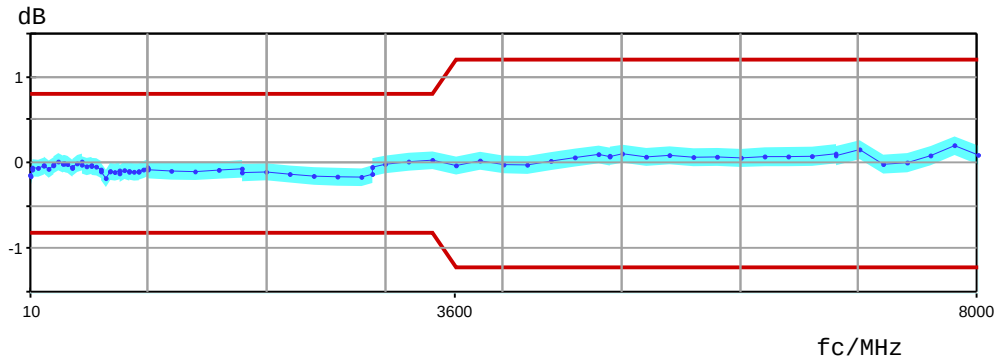
Input 1, preselector on, Preamplifier on, RF attenuation 5 dB, AC coupled



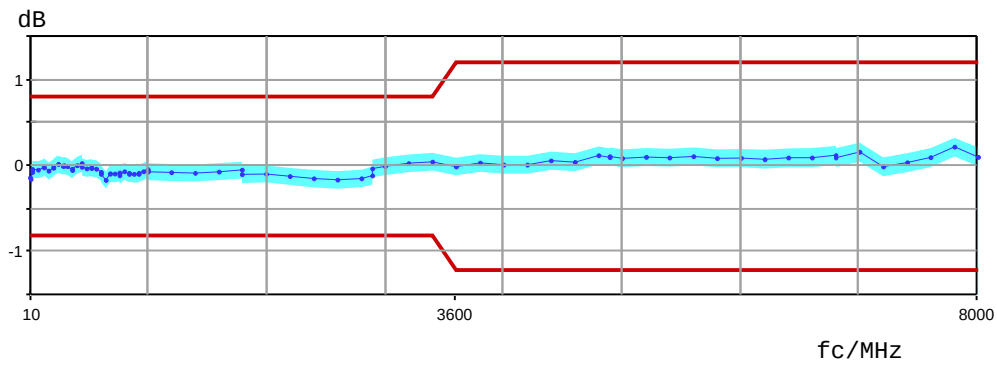
Input 1, preselector on, Preamplifier on, RF attenuation 10 dB, DC coupled



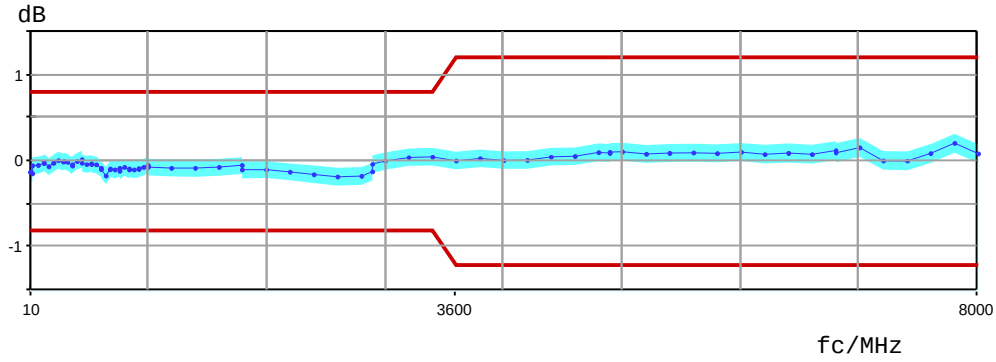
Input 1, preselector on, Preamplifier on, RF attenuation 10 dB, AC coupled



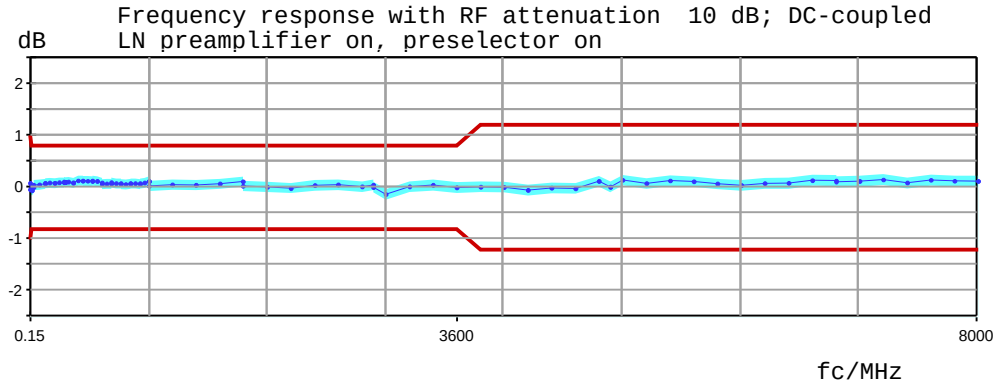
Input 1, preselector on, Preamplifier on, RF attenuation 20 dB, AC coupled



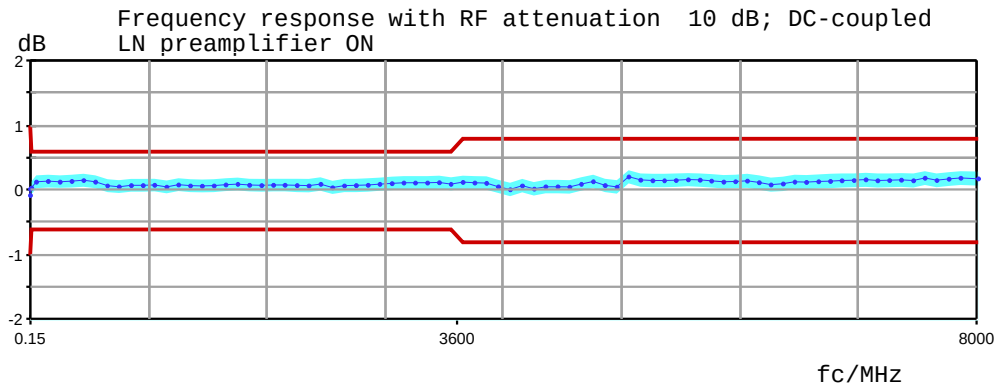
Input 1, preselector on, Preamplifier on, RF attenuation 40 dB, AC coupled



25. Frequency response, Input 1, LN preamplifier on, preselector on

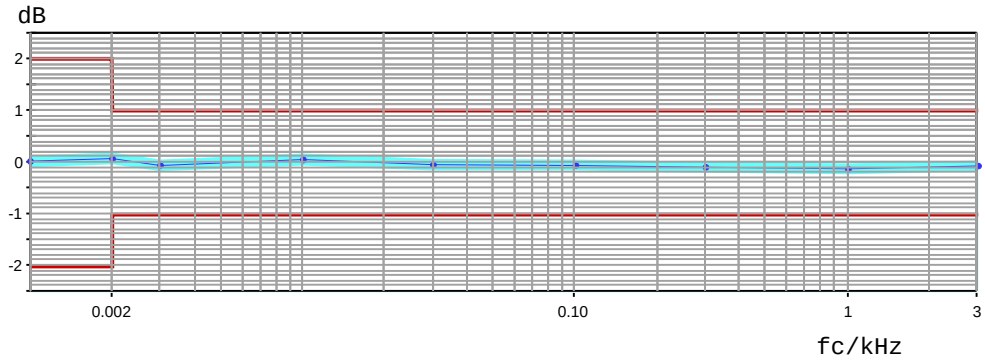


26. Frequency response, Input 1, LN preamplifier on



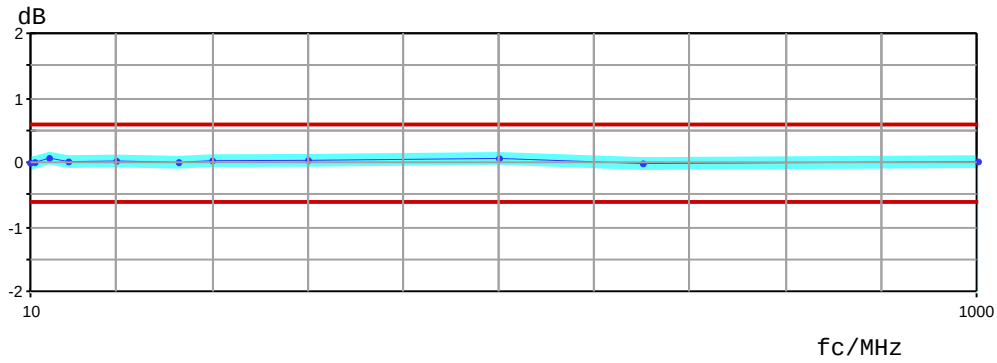
Frequency response <9 kHz, Input 2, preselector off, preamplifier off

Input 2, RF attenuation 10 dB, DC coupled

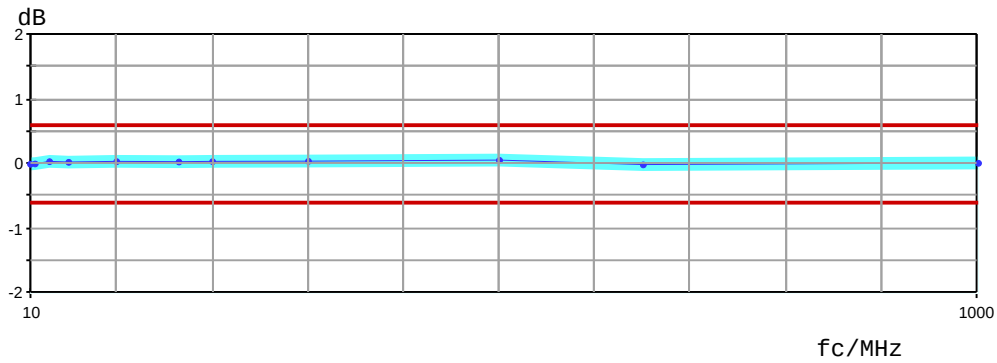


27. Frequency response, Input 2, preselector off, preamplifier off

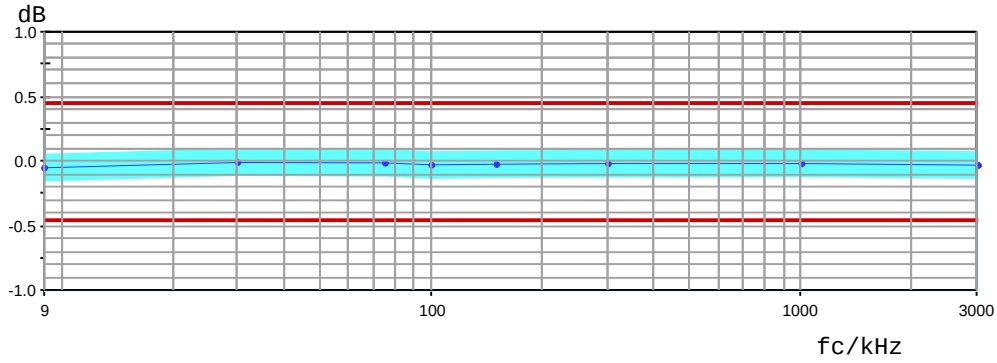
Input 2, RF attenuation 0 dB, AC coupled



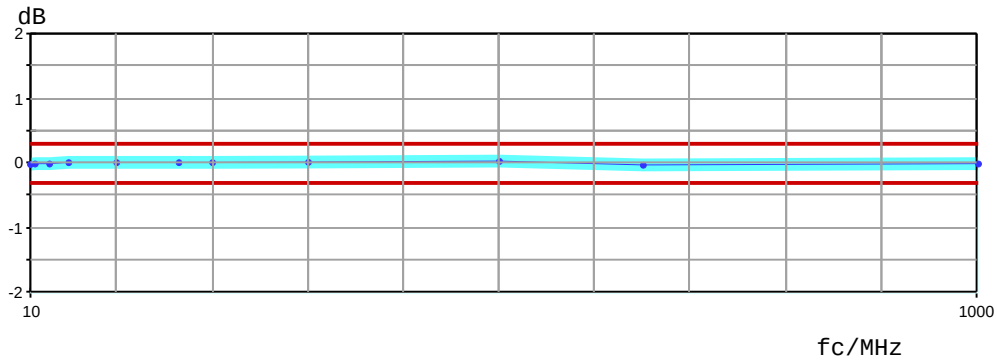
Input 2, RF attenuation 5 dB, AC coupled



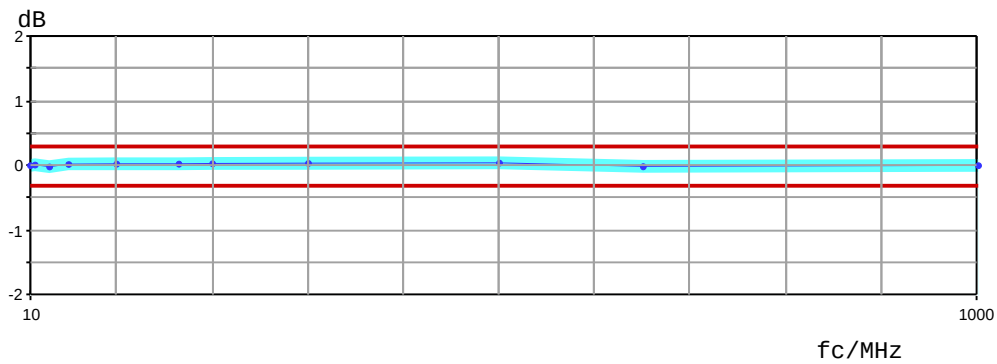
Input 2, RF attenuation 10 dB, DC coupled



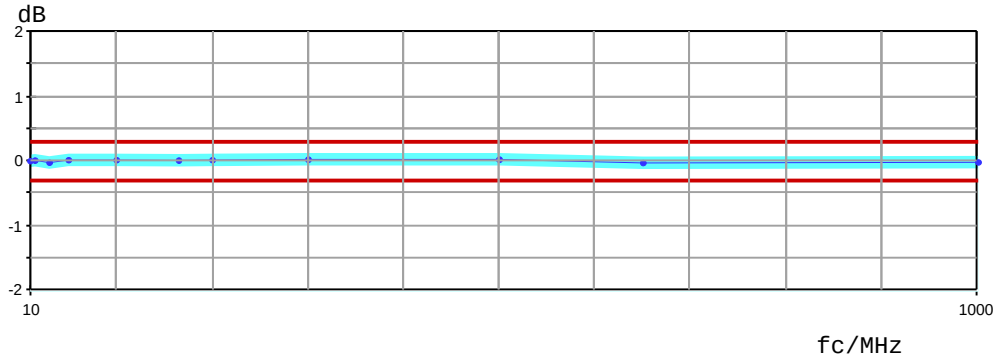
Input 2, RF attenuation 10 dB, AC coupled



Input 2, RF attenuation 20 dB, AC coupled

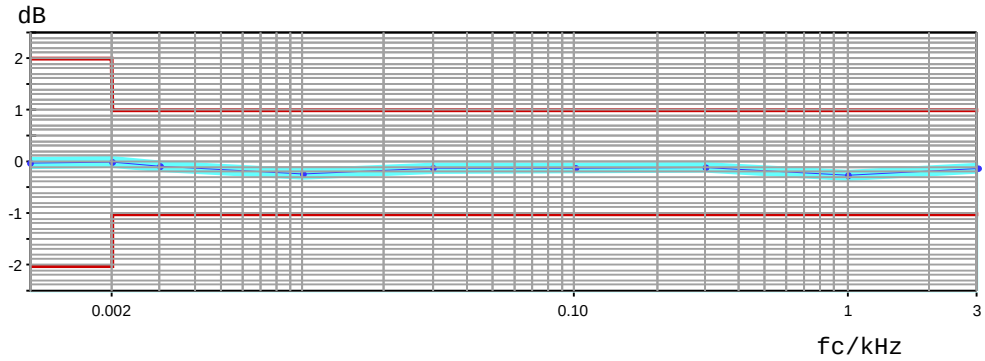


Input 2, RF attenuation 40 dB, AC coupled



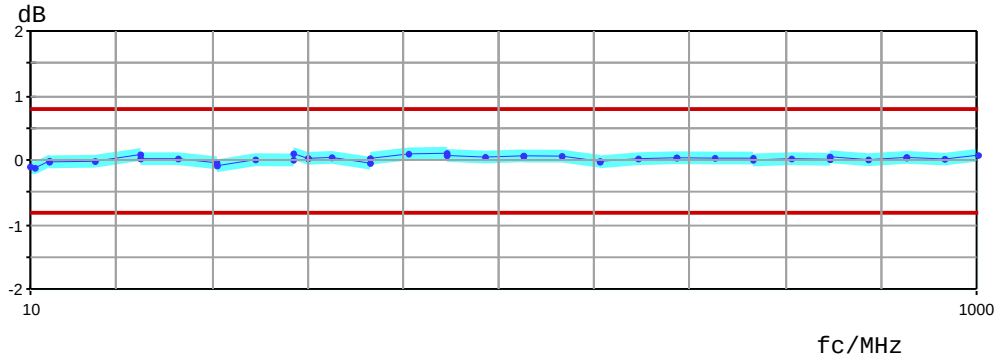
28. Frequency response <9 kHz, Input 2, preselector on, preamplifier off

Input 2, RF attenuation 10 dB, DC coupled

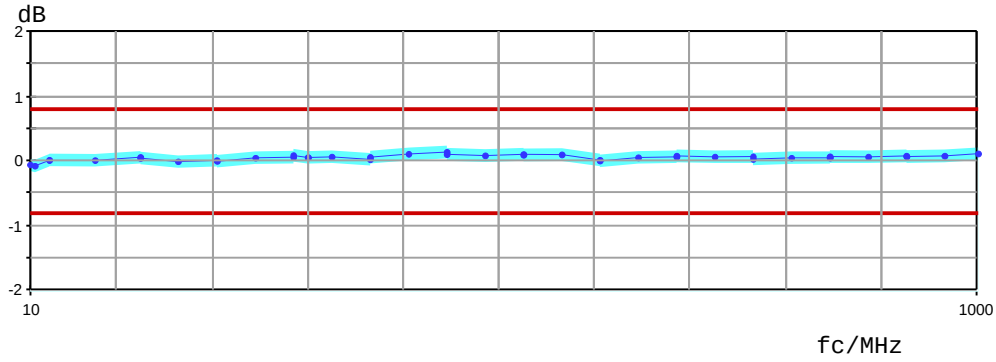


29. Frequency response, Input 2, preselector on, preamplifier off

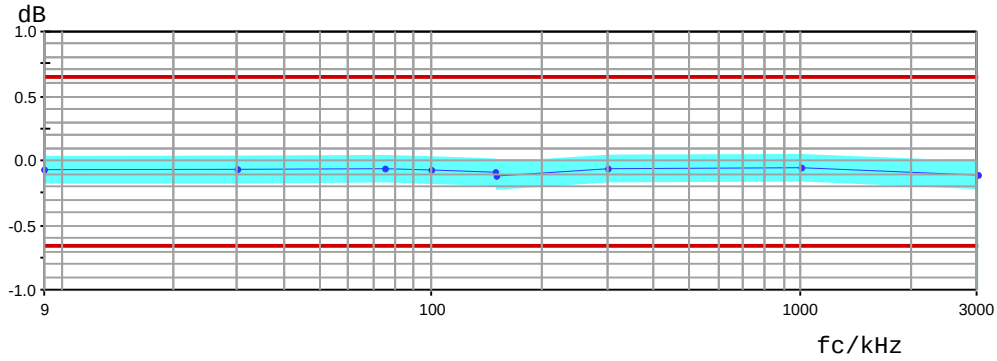
Input 2, preselector on, Preamplifier off, RF attenuation 0 dB, AC coupled



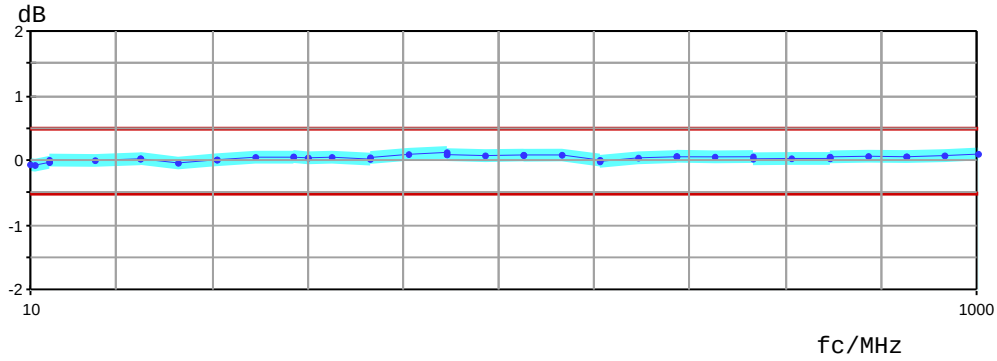
Input 2, preselector on, Preamplifier off, RF attenuation 5 dB, AC coupled



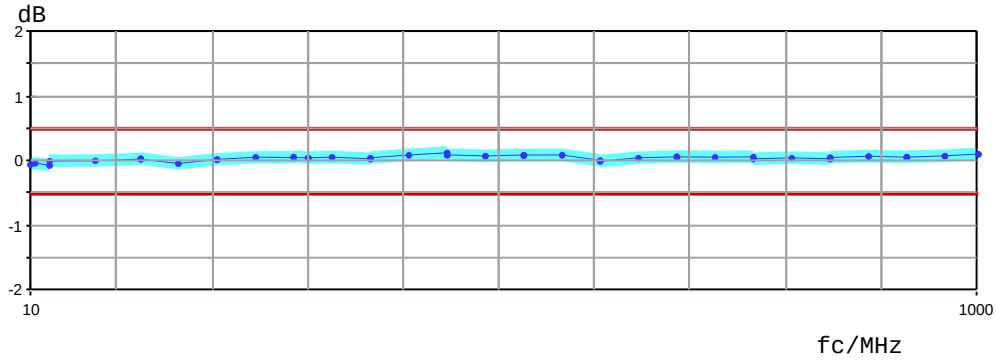
Input 2, preselector on, Preamplifier off, RF attenuation 10 dB, DC coupled



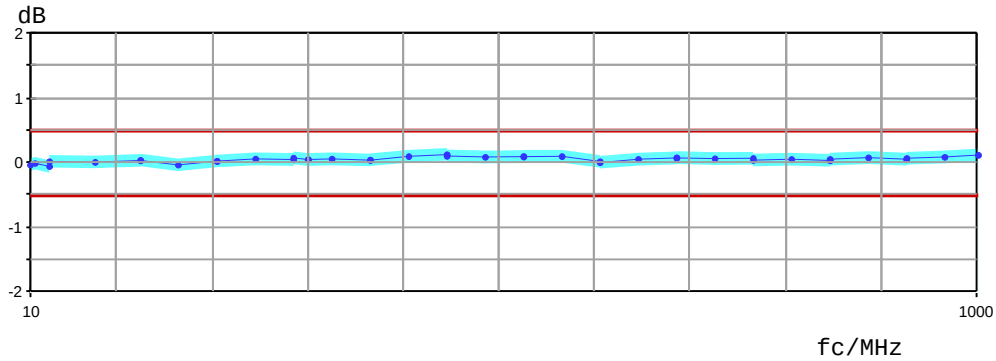
Input 2, preselector on, Preamplifier off, RF attenuation 10 dB, AC coupled



Input 2, preselector on, Preamplifier off, RF attenuation 20 dB, AC coupled



Input 2, preselector on, Preamplifier off, RF attenuation 40 dB, AC coupled



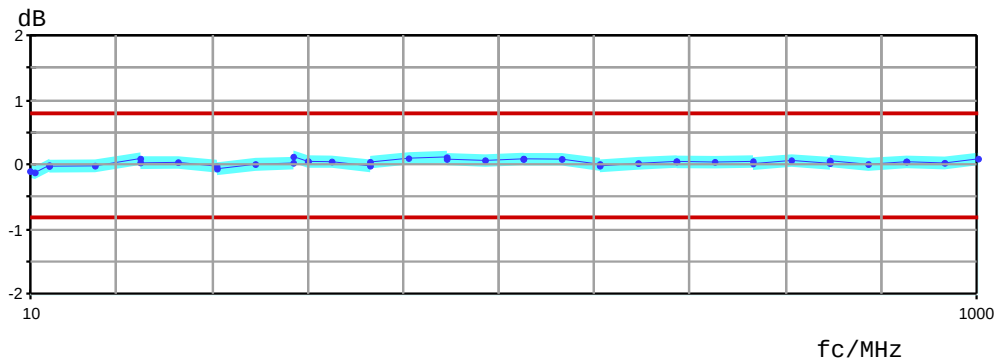
30. Frequency response <9 kHz, Input 2, preselector on, preamplifier on

Input 2, RF attenuation 10 dB, DC coupled

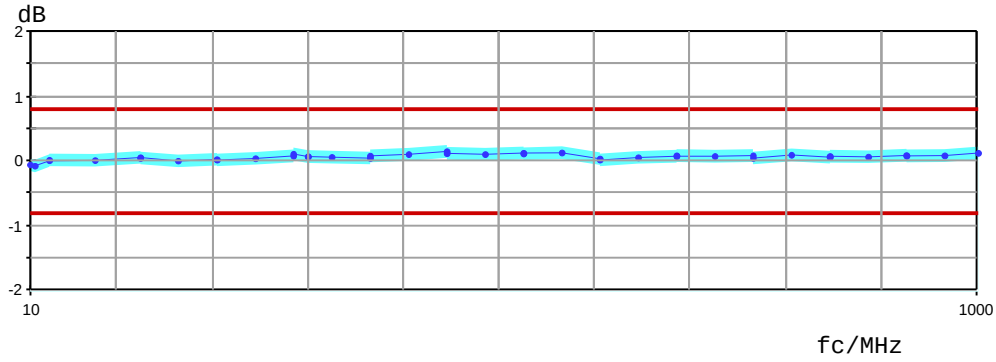
fc	DL	Actual	MU
1.000 kHz	1.00 dB	-0.21 dB	0.11 dB

31. Frequency response, Input 2, preselector on, preamplifier on

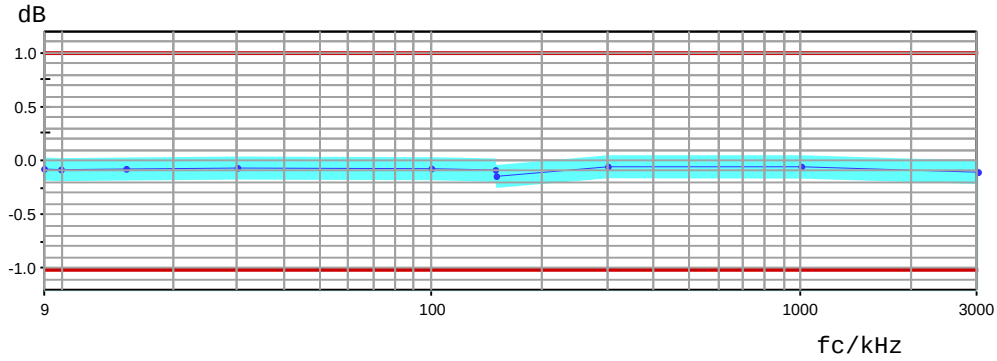
Input 2, preselector on, Preamplifier on, RF attenuation 0 dB, AC coupled



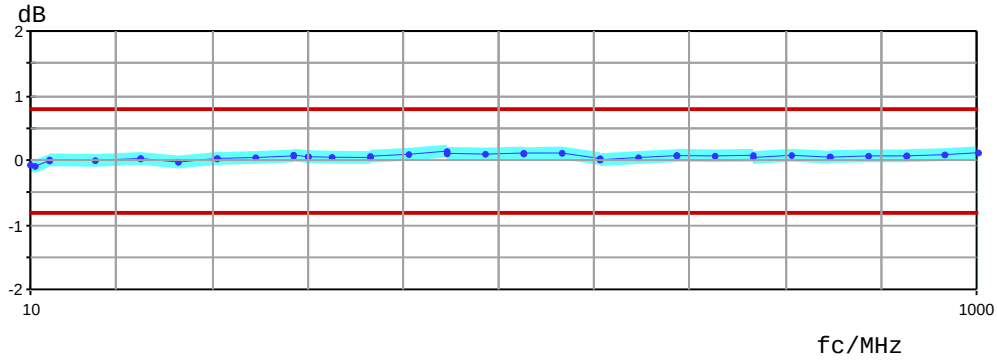
Input 2, preselector on, Preamplifier on, RF attenuation 5 dB, AC coupled



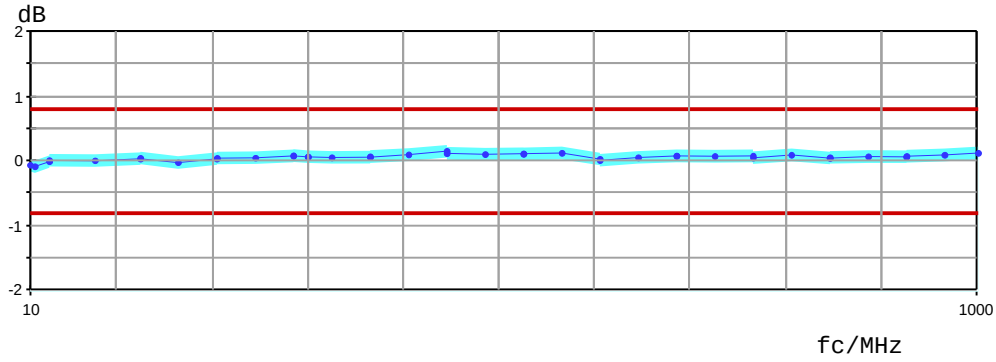
Input 2, preselector on, Preamplifier on, RF attenuation 10 dB, DC coupled



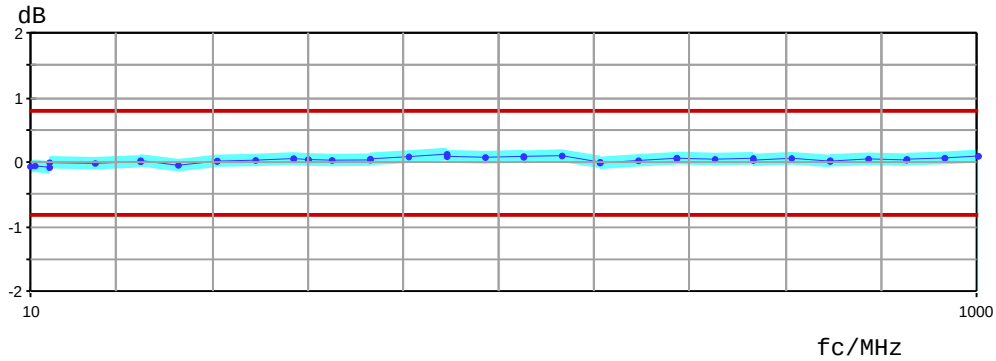
Input 2, preselector on, Preamplifier on, RF attenuation 10 dB, AC coupled



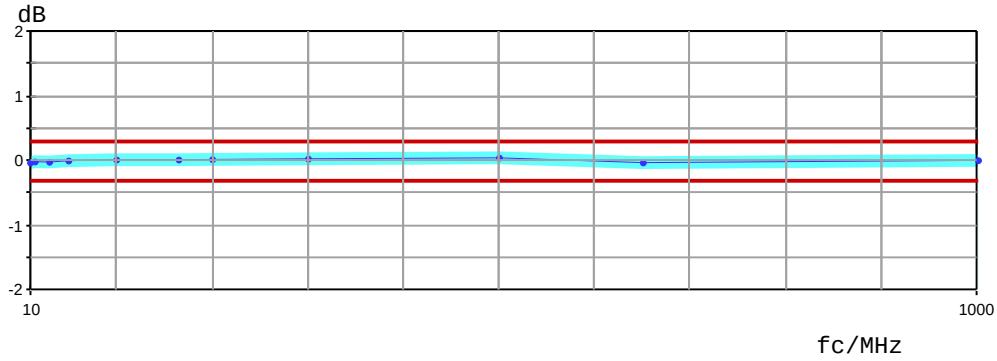
Input 2, preselector on, Preamplifier on, RF attenuation 20 dB, AC coupled



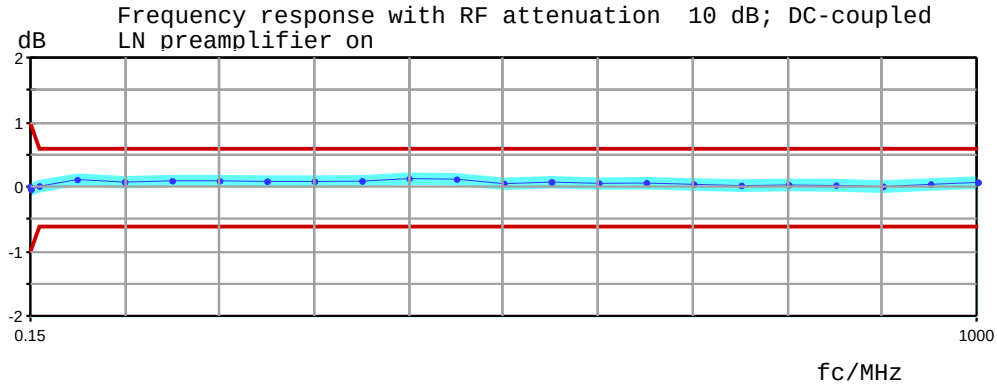
Input 2, preselector on, Preamplifier on, RF attenuation 40 dB, AC coupled



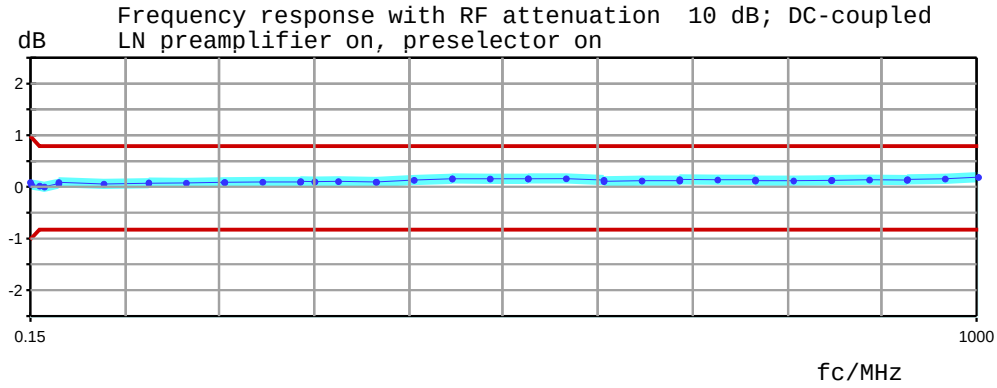
Frequency response, Input 2, RF attenuation 10 dB, Limiter ON



32. Frequency response, Input 2, LN preamplifier on

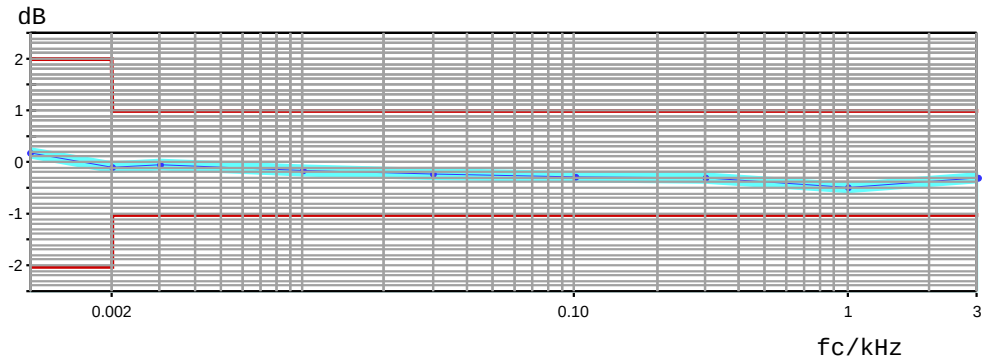


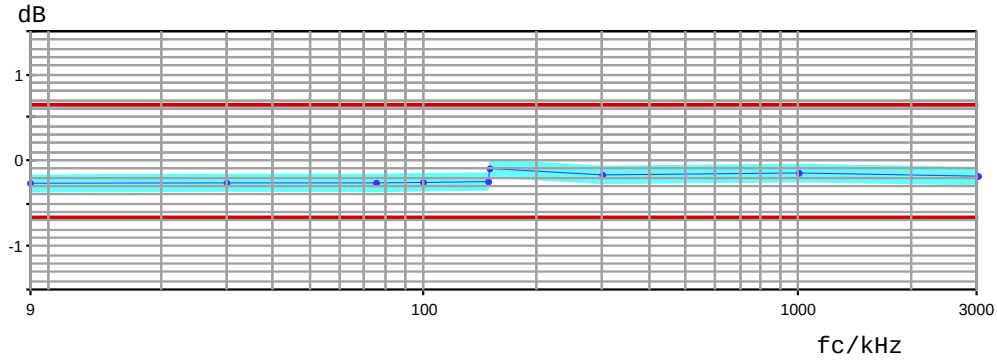
33. Frequency response, Input 2, LN preamplifier on, preselector on

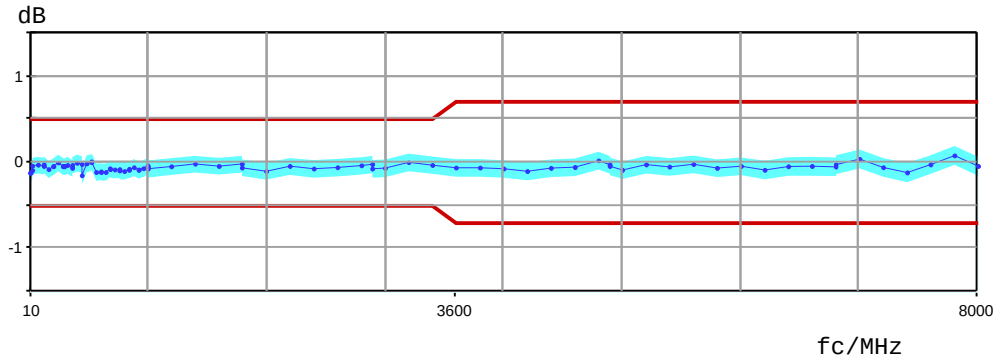


34. Frequency response in receiver mode

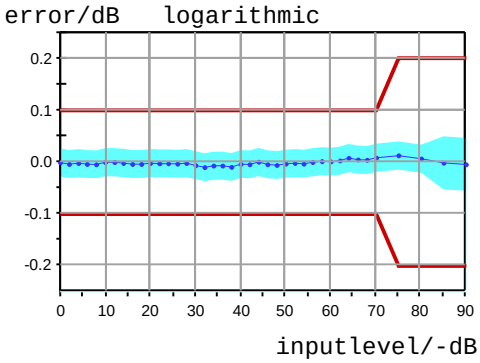
RF attenuation 10 dB, DC coupled



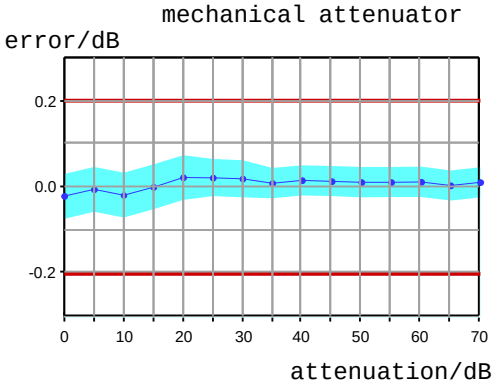




35. Display nonlinearity



36. Attenuator switching uncertainty



37. Checking the Phase Noise

carrier	carrier offset	DUL / dBc(1Hz)	Actual/ dBc(1Hz)	
1000.0 MHz	1.0 MHz	-145	-149.73	{a,g}
1000.0 MHz	100.0 kHz	-136	-144.79	{a,g}
1000.0 MHz	10.0 kHz	-134	-140.38	{a,g}
1000.0 MHz	1.0 kHz	-125	-131.89	{a,g}

38. Return Loss at the RF Input 1

RF attenuation 0 dB, Input 1, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	2.00	1.45	0.05
1.008 MHz	2.00	1.52	0.05
2.007 MHz	2.00	1.52	0.05
3.006 MHz	2.00	1.52	0.05
4.005 MHz	2.00	1.52	0.05
5.005 MHz	2.00	1.52	0.05
6.004 MHz	2.00	1.51	0.05
7.003 MHz	2.00	1.50	0.05
8.002 MHz	2.00	1.49	0.05
9.002 MHz	2.00	1.49	0.05
10.000 MHz	2.00	1.47	0.05

RF attenuation 5 dB, Input 1, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.50	1.13	0.05
1.008 MHz	1.50	1.16	0.05
2.007 MHz	1.50	1.16	0.05
3.006 MHz	1.50	1.16	0.05
4.005 MHz	1.50	1.16	0.05
5.005 MHz	1.50	1.16	0.05
6.004 MHz	1.50	1.15	0.05
7.003 MHz	1.50	1.15	0.05
8.002 MHz	1.50	1.15	0.05
9.002 MHz	1.50	1.15	0.05
10.000 MHz	1.50	1.15	0.05

RF attenuation 10 dB, Input 1, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.04	0.05
1.008 MHz	1.20	1.05	0.05
2.007 MHz	1.20	1.06	0.05
3.006 MHz	1.20	1.06	0.05
4.005 MHz	1.20	1.05	0.05
5.005 MHz	1.20	1.06	0.05
6.004 MHz	1.20	1.06	0.05
7.003 MHz	1.20	1.06	0.05
8.002 MHz	1.20	1.06	0.05
9.002 MHz	1.20	1.06	0.05
10.000 MHz	1.20	1.06	0.05

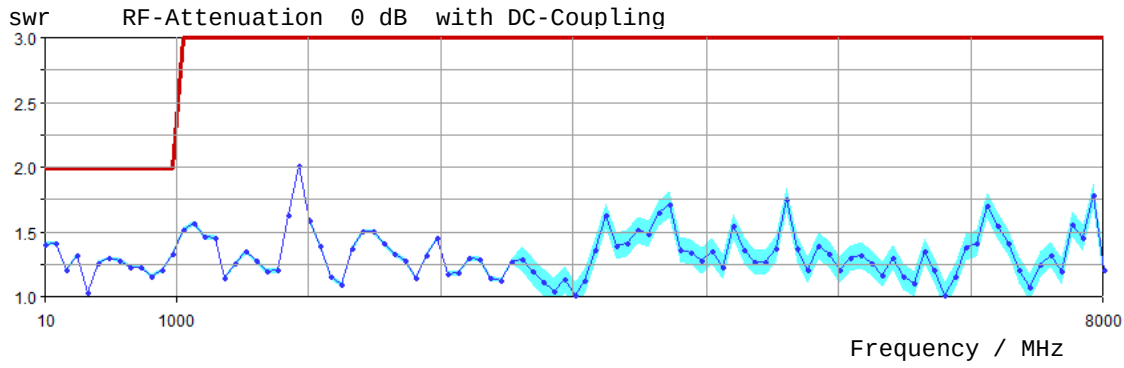
RF attenuation 20 dB, Input 1, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.01	0.05
1.008 MHz	1.20	1.00	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.02	0.05
5.005 MHz	1.20	1.01	0.05
6.004 MHz	1.20	1.02	0.05
7.003 MHz	1.20	1.01	0.05
8.002 MHz	1.20	1.02	0.05
9.002 MHz	1.20	1.02	0.05
10.000 MHz	1.20	1.02	0.05

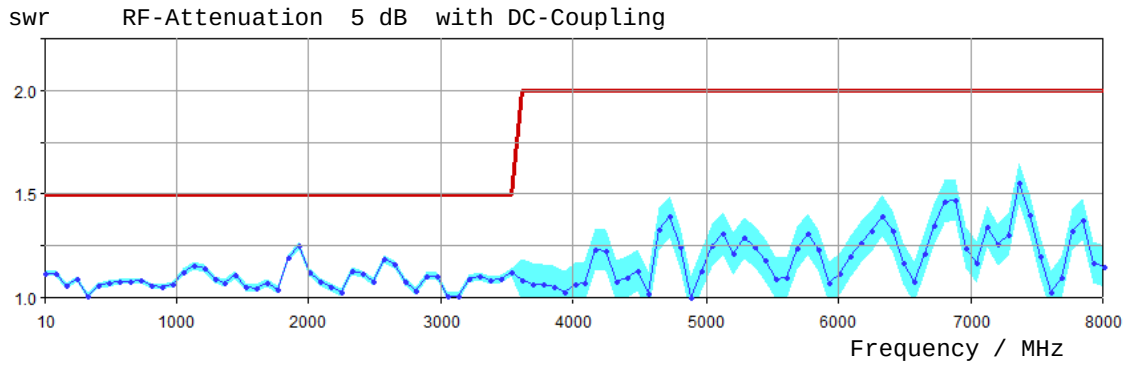
RF attenuation 40 dB, Input 1, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.01	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.01	0.05
5.005 MHz	1.20	1.01	0.05
6.004 MHz	1.20	1.01	0.05
7.003 MHz	1.20	1.02	0.05
8.002 MHz	1.20	1.01	0.05
9.002 MHz	1.20	1.02	0.05
10.000 MHz	1.20	1.01	0.05

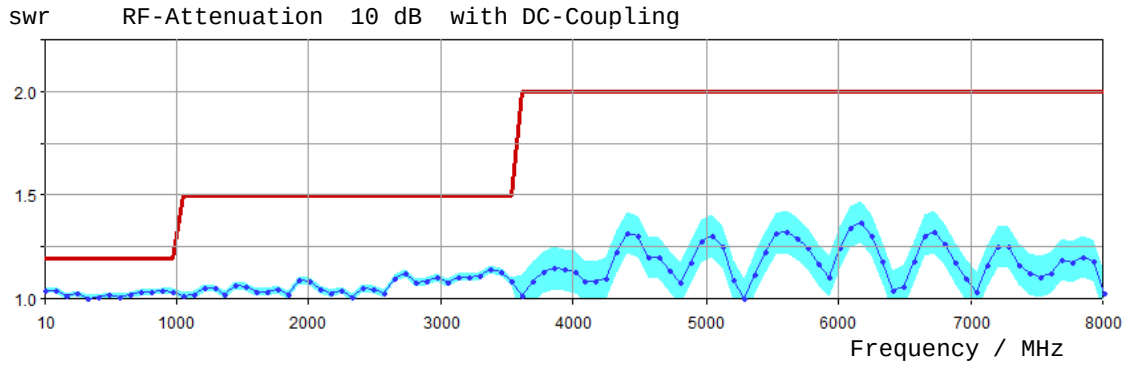
RF attenuation 0 dB, Input 1, DC coupled, preselector off, preamplifier off



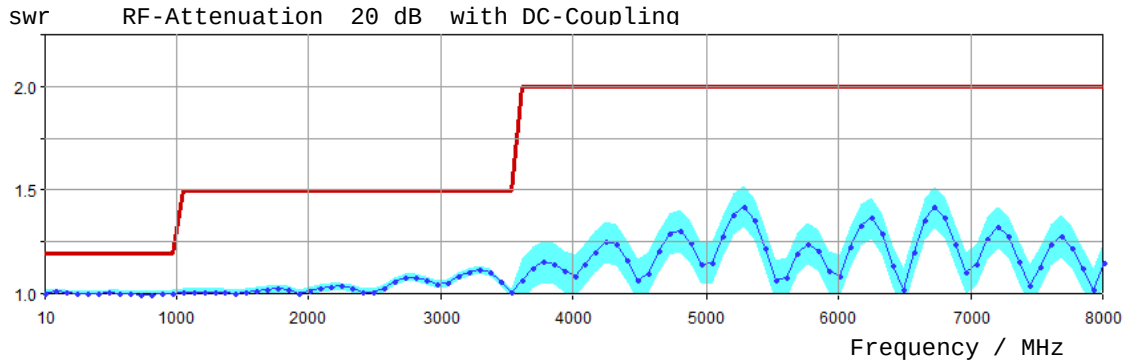
RF attenuation 5 dB, Input 1, DC coupled, preselector off, preamplifier off



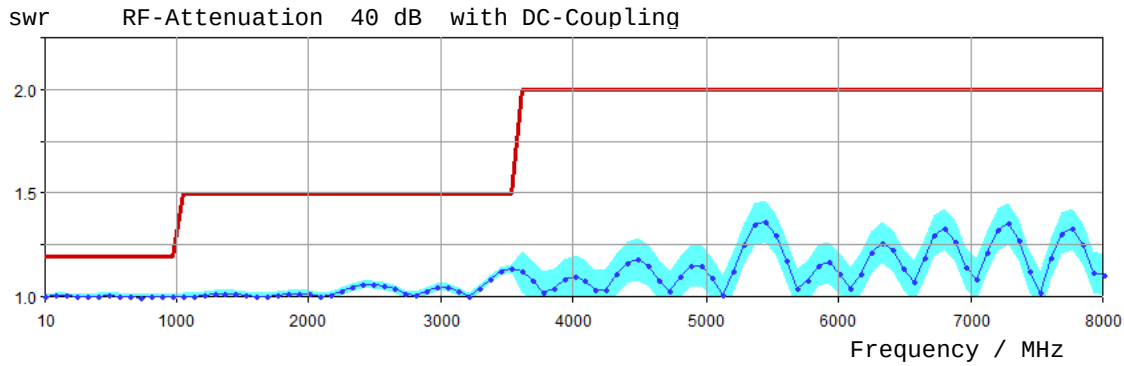
RF attenuation 10 dB, Input 1, DC coupled, preselector off, preamplifier off



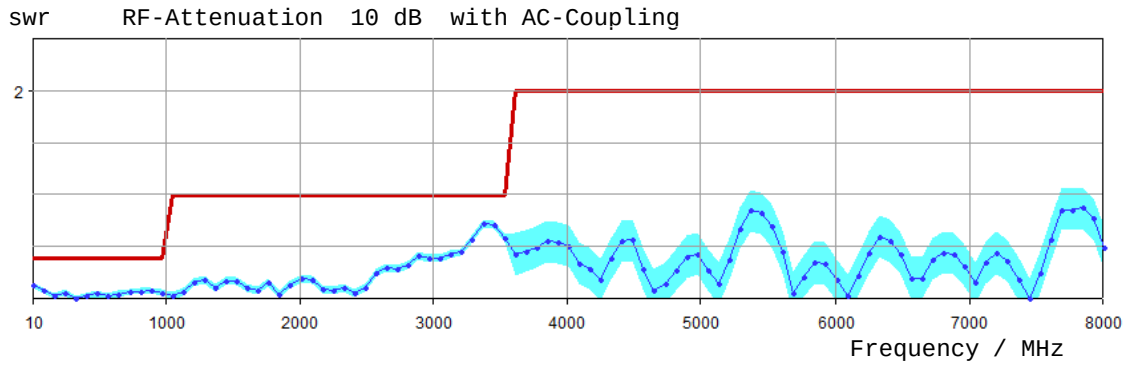
RF attenuation 20 dB, Input 1, DC coupled, preselector off, preamplifier off



RF attenuation 40 dB, Input 1, DC coupled, preselector off, preamplifier off



RF attenuation 10 dB, Input 1, AC coupled, preselector off, preamplifier off



39. Return Loss at the RF Input 1 with preselector

RF attenuation 0 dB, Input 1, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	2.00	1.14	0.05
1.008 MHz	2.00	1.53	0.05
2.007 MHz	2.00	1.53	0.05
3.006 MHz	2.00	1.55	0.05
4.005 MHz	2.00	1.57	0.05
5.005 MHz	2.00	1.60	0.05
6.004 MHz	2.00	1.61	0.05
7.003 MHz	2.00	1.61	0.05
8.002 MHz	2.00	1.59	0.05
9.002 MHz	2.00	1.56	0.05
10.000 MHz	2.00	1.51	0.05

RF attenuation 5 dB, Input 1, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.50	1.04	0.05
1.008 MHz	1.50	1.14	0.05
2.007 MHz	1.50	1.14	0.05
3.006 MHz	1.50	1.14	0.05
4.005 MHz	1.50	1.15	0.05
5.005 MHz	1.50	1.15	0.05
6.004 MHz	1.50	1.16	0.05
7.003 MHz	1.50	1.16	0.05
8.002 MHz	1.50	1.16	0.05
9.002 MHz	1.50	1.16	0.05
10.000 MHz	1.50	1.15	0.05

RF attenuation 10 dB, Input 1, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.01	0.05
1.008 MHz	1.20	1.05	0.05
2.007 MHz	1.20	1.04	0.05
3.006 MHz	1.20	1.04	0.05
4.005 MHz	1.20	1.04	0.05
5.005 MHz	1.20	1.05	0.05
6.004 MHz	1.20	1.05	0.05
7.003 MHz	1.20	1.06	0.05
8.002 MHz	1.20	1.06	0.05
9.002 MHz	1.20	1.06	0.05
10.000 MHz	1.20	1.06	0.05

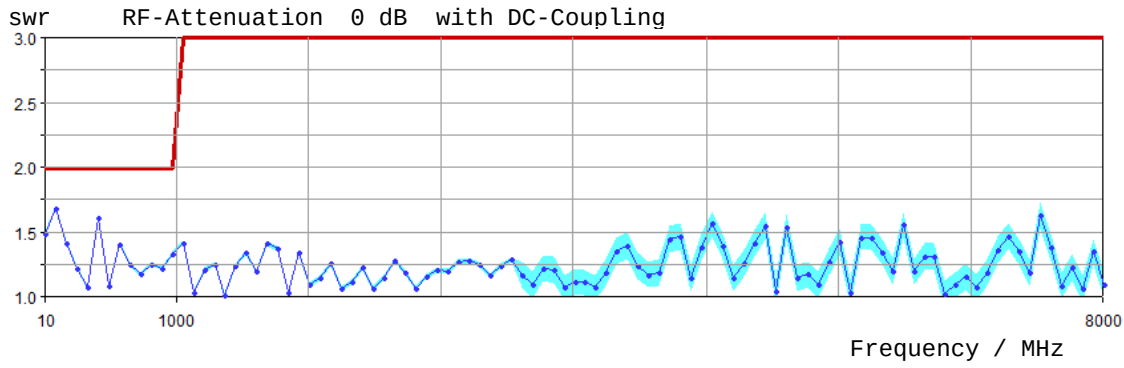
RF attenuation 20 dB, Input 1, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.01	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.00	0.05
5.005 MHz	1.20	1.01	0.05
6.004 MHz	1.20	1.01	0.05
7.003 MHz	1.20	1.01	0.05
8.002 MHz	1.20	1.01	0.05
9.002 MHz	1.20	1.02	0.05
10.000 MHz	1.20	1.02	0.05

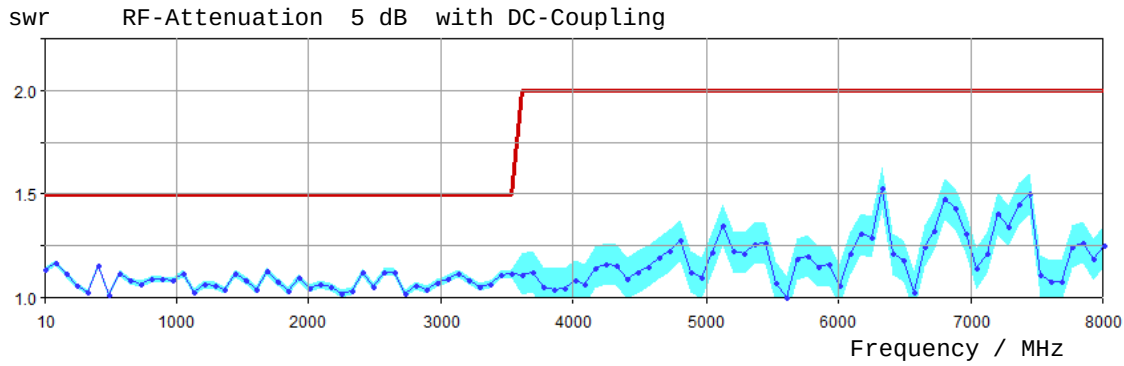
RF attenuation 40 dB, Input 1, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.01	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.00	0.05
5.005 MHz	1.20	1.00	0.05
6.004 MHz	1.20	1.00	0.05
7.003 MHz	1.20	1.01	0.05
8.002 MHz	1.20	1.01	0.05
9.002 MHz	1.20	1.01	0.05
10.000 MHz	1.20	1.02	0.05

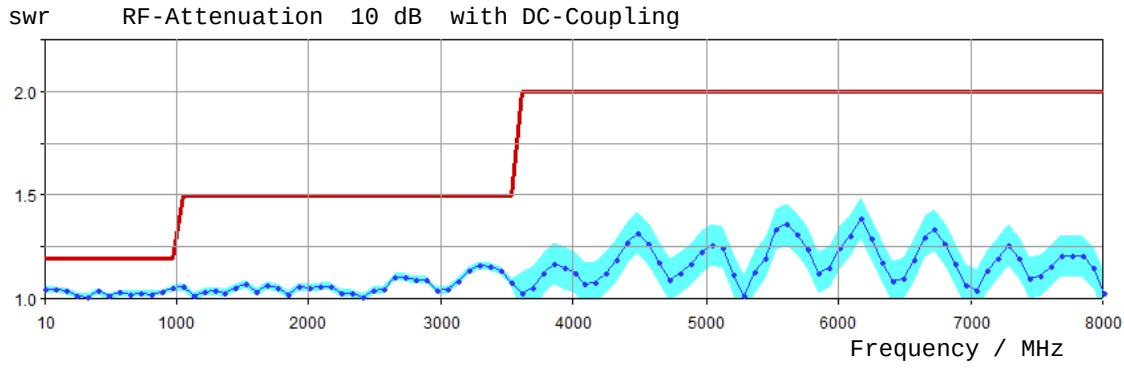
RF attenuation 0 dB, Input 1, DC coupled, preselector on, preamplifier off



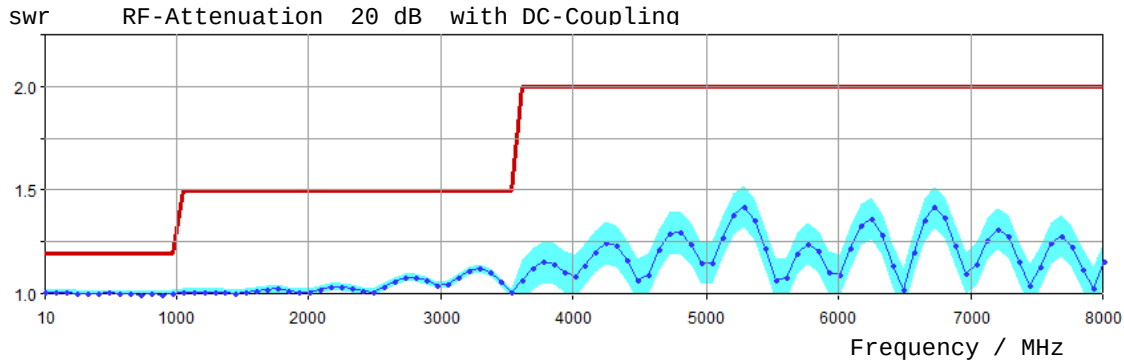
RF attenuation 5 dB, Input 1, DC coupled, preselector on, preamplifier off



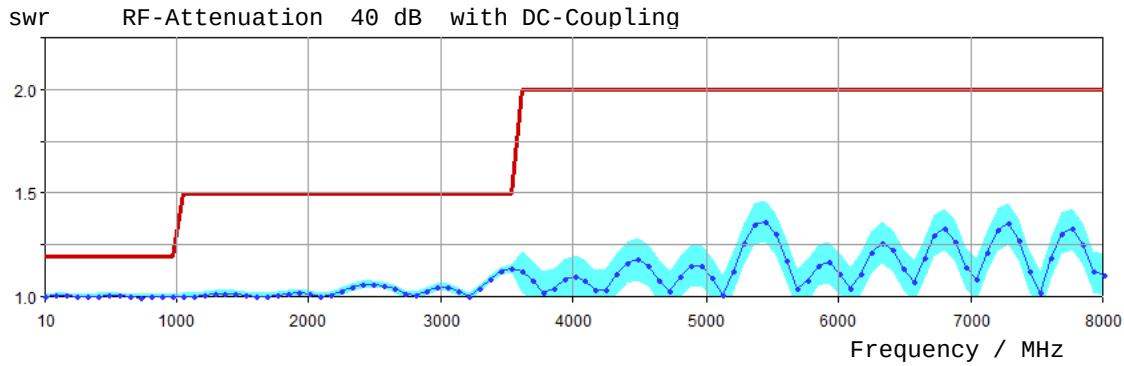
RF attenuation 10 dB, Input 1, DC coupled, preselector on, preamplifier off



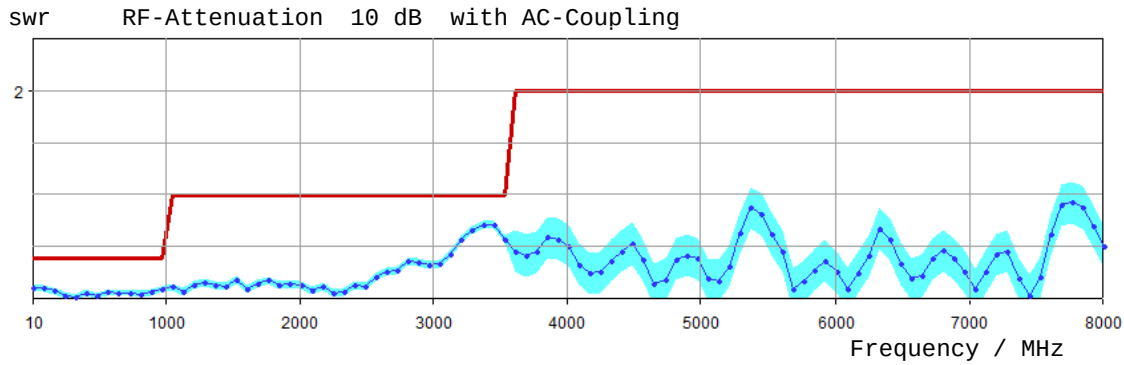
RF attenuation 20 dB, Input 1, DC coupled, preselector on, preamplifier off



RF attenuation 40 dB, Input 1, DC coupled, preselector on, preamplifier off



RF attenuation 10 dB, Input 1, AC coupled, preselector on, preamplifier off



40. Return Loss at the RF Input 1 with preselector and preamplifier

RF attenuation 0 dB, Input 1, DC coupled, preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	2.00	1.14	0.05
1.008 MHz	2.00	1.53	0.05
2.007 MHz	2.00	1.53	0.05
3.006 MHz	2.00	1.55	0.05
4.005 MHz	2.00	1.57	0.05
5.005 MHz	2.00	1.60	0.05
6.004 MHz	2.00	1.61	0.05
7.003 MHz	2.00	1.61	0.05
8.002 MHz	2.00	1.59	0.05
9.002 MHz	2.00	1.56	0.05
10.000 MHz	2.00	1.51	0.05

RF attenuation 5 dB, Input 1, DC coupled, preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.50	1.04	0.05
1.008 MHz	1.50	1.14	0.05
2.007 MHz	1.50	1.14	0.05
3.006 MHz	1.50	1.14	0.05
4.005 MHz	1.50	1.15	0.05
5.005 MHz	1.50	1.15	0.05
6.004 MHz	1.50	1.16	0.05
7.003 MHz	1.50	1.16	0.05
8.002 MHz	1.50	1.16	0.05
9.002 MHz	1.50	1.16	0.05
10.000 MHz	1.50	1.15	0.05

RF attenuation 10 dB, Input 1, DC coupled, preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.01	0.05
1.008 MHz	1.20	1.05	0.05
2.007 MHz	1.20	1.04	0.05
3.006 MHz	1.20	1.04	0.05
4.005 MHz	1.20	1.04	0.05
5.005 MHz	1.20	1.05	0.05
6.004 MHz	1.20	1.05	0.05
7.003 MHz	1.20	1.06	0.05
8.002 MHz	1.20	1.06	0.05
9.002 MHz	1.20	1.06	0.05
10.000 MHz	1.20	1.06	0.05

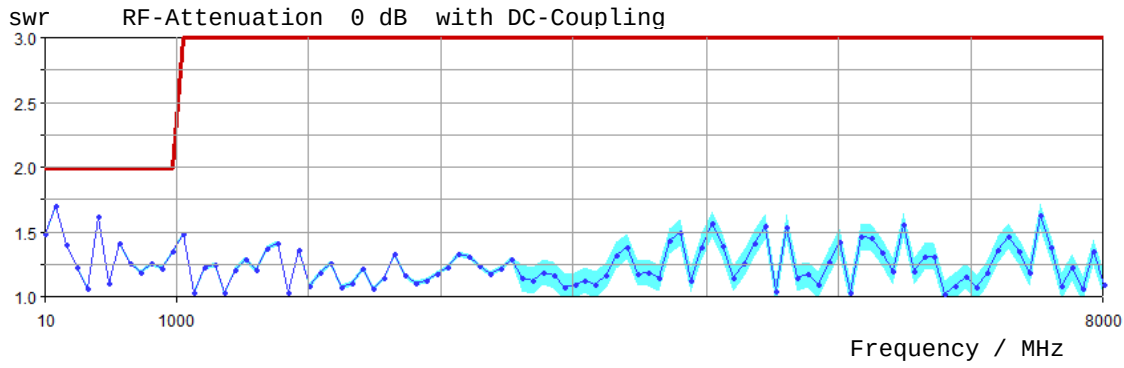
RF attenuation 20 dB, Input 1, DC coupled, preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.00	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.00	0.05
4.005 MHz	1.20	1.01	0.05
5.005 MHz	1.20	1.01	0.05
6.004 MHz	1.20	1.01	0.05
7.003 MHz	1.20	1.01	0.05
8.002 MHz	1.20	1.02	0.05
9.002 MHz	1.20	1.02	0.05
10.000 MHz	1.20	1.02	0.05

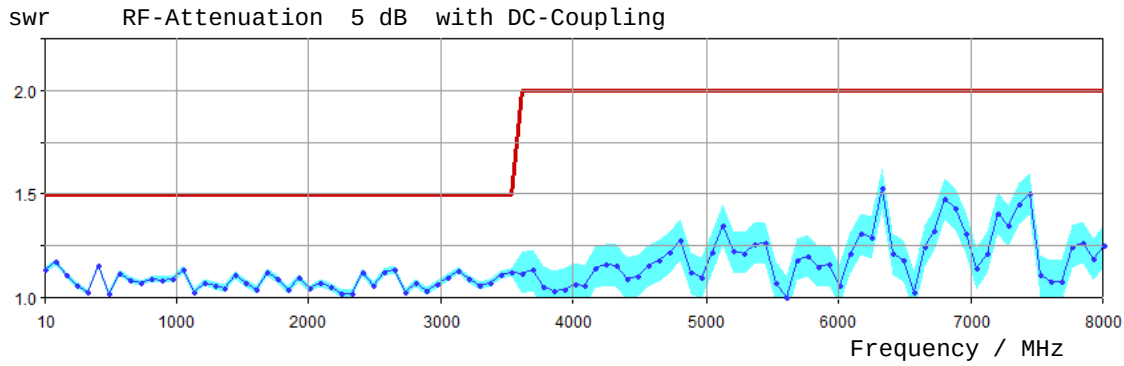
RF attenuation 40 dB, Input 1, DC coupled, preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.01	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.02	0.05
5.005 MHz	1.20	1.01	0.05
6.004 MHz	1.20	1.00	0.05
7.003 MHz	1.20	1.01	0.05
8.002 MHz	1.20	1.01	0.05
9.002 MHz	1.20	1.01	0.05
10.000 MHz	1.20	1.02	0.05

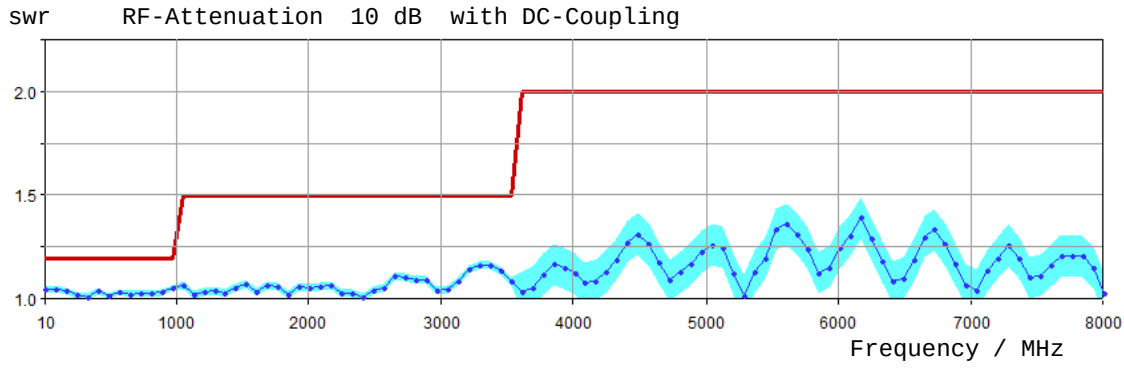
RF attenuation 0 dB, Input 1, DC coupled, preselector on, preamplifier on



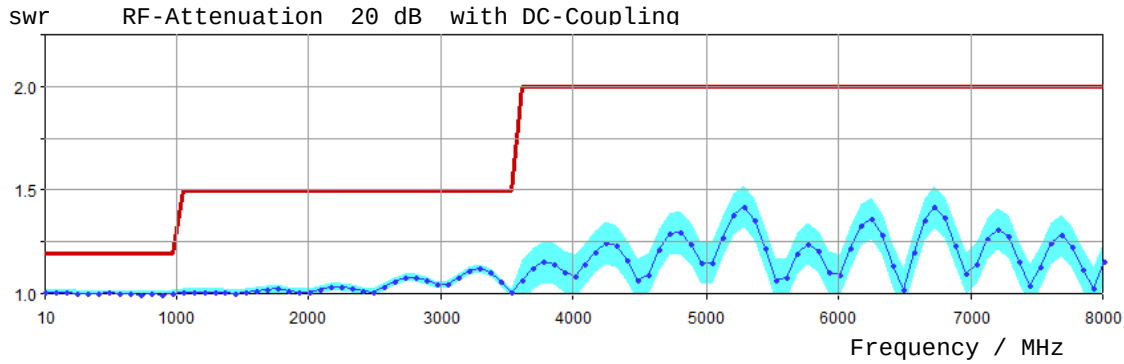
RF attenuation 5 dB, Input 1, DC coupled, preselector on, preamplifier on



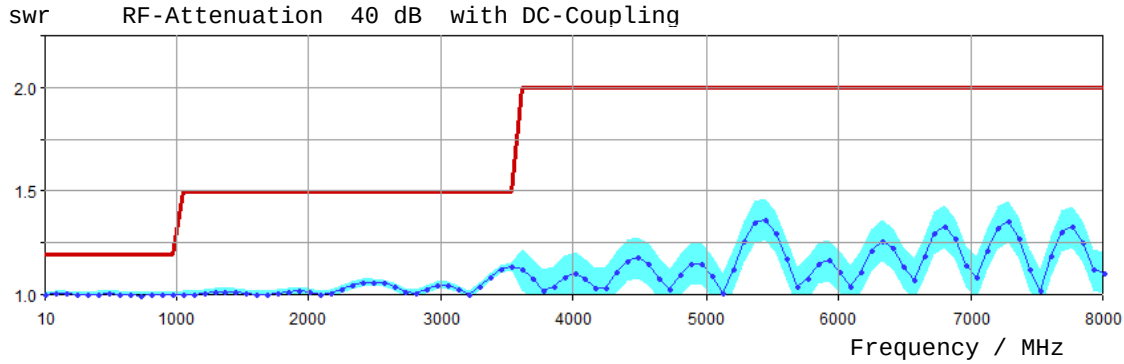
RF attenuation 10 dB, Input 1, DC coupled, preselector on, preamplifier on



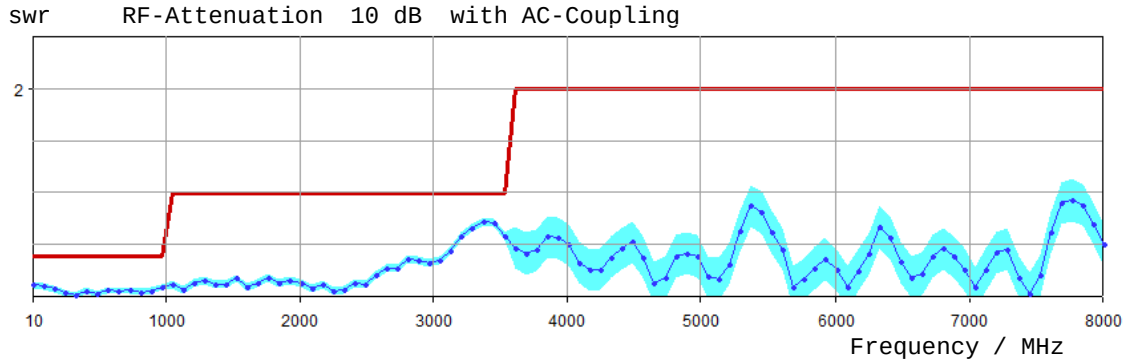
RF attenuation 20 dB, Input 1, DC coupled, preselector on, preamplifier on



RF attenuation 40 dB, Input 1, DC coupled, preselector on, preamplifier on



RF attenuation 10 dB, Input 1, AC coupled, preselector on, preamplifier on



41. Return Loss at the RF Input 2

RF attenuation 0 dB, Input 2, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	2.00	1.45	0.05
1.008 MHz	2.00	1.52	0.05
2.007 MHz	2.00	1.52	0.05
3.006 MHz	2.00	1.52	0.05
4.005 MHz	2.00	1.52	0.05
5.005 MHz	2.00	1.52	0.05
6.004 MHz	2.00	1.51	0.05
7.003 MHz	2.00	1.50	0.05
8.002 MHz	2.00	1.50	0.05
9.002 MHz	2.00	1.49	0.05
10.000 MHz	2.00	1.48	0.05

RF attenuation 5 dB, Input 2, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.50	1.14	0.05
1.008 MHz	1.50	1.16	0.05
2.007 MHz	1.50	1.16	0.05
3.006 MHz	1.50	1.16	0.05
4.005 MHz	1.50	1.16	0.05
5.005 MHz	1.50	1.16	0.05
6.004 MHz	1.50	1.16	0.05
7.003 MHz	1.50	1.16	0.05
8.002 MHz	1.50	1.16	0.05
9.002 MHz	1.50	1.15	0.05
10.000 MHz	1.50	1.15	0.05

RF attenuation 10 dB, Input 2, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.04	0.05
1.008 MHz	1.20	1.06	0.05
2.007 MHz	1.20	1.06	0.05
3.006 MHz	1.20	1.06	0.05
4.005 MHz	1.20	1.06	0.05
5.005 MHz	1.20	1.06	0.05
6.004 MHz	1.20	1.06	0.05
7.003 MHz	1.20	1.06	0.05
8.002 MHz	1.20	1.06	0.05
9.002 MHz	1.20	1.06	0.05
10.000 MHz	1.20	1.07	0.05

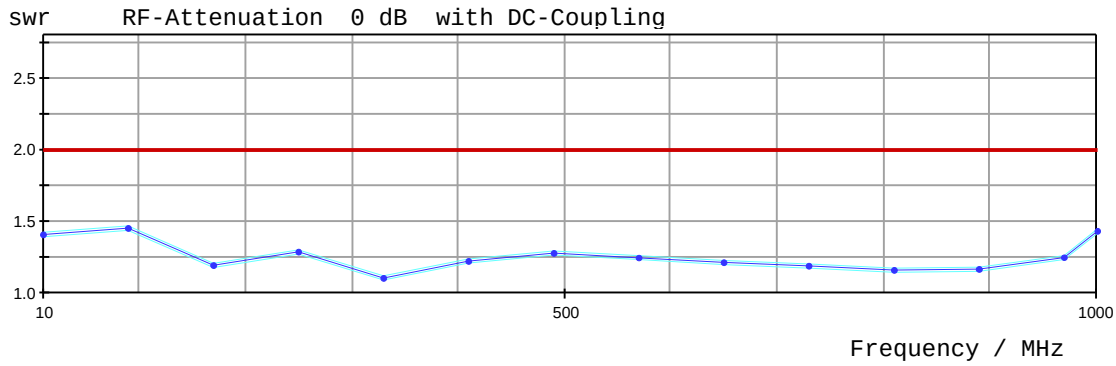
RF attenuation 20 dB, Input 2, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.01	0.05
1.008 MHz	1.20	1.02	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.02	0.05
5.005 MHz	1.20	1.02	0.05
6.004 MHz	1.20	1.02	0.05
7.003 MHz	1.20	1.02	0.05
8.002 MHz	1.20	1.03	0.05
9.002 MHz	1.20	1.03	0.05
10.000 MHz	1.20	1.03	0.05

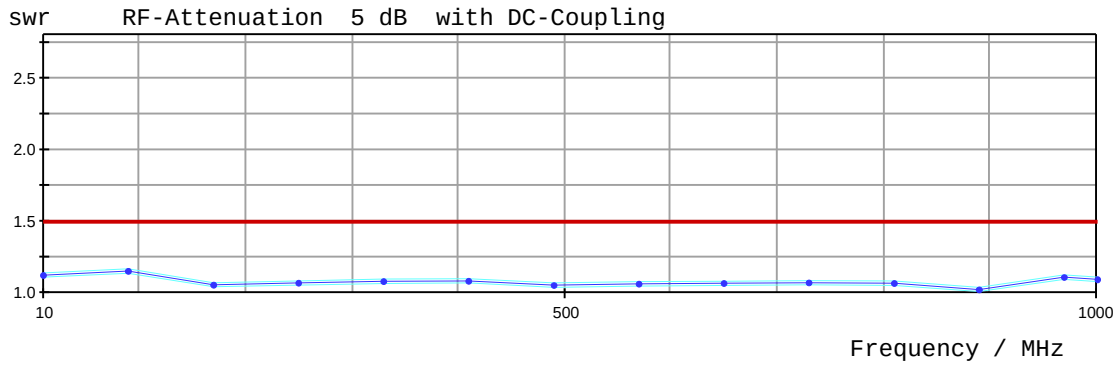
RF attenuation 40 dB, Input 2, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.01	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.02	0.05
4.005 MHz	1.20	1.01	0.05
5.005 MHz	1.20	1.01	0.05
6.004 MHz	1.20	1.02	0.05
7.003 MHz	1.20	1.02	0.05
8.002 MHz	1.20	1.02	0.05
9.002 MHz	1.20	1.03	0.05
10.000 MHz	1.20	1.03	0.05

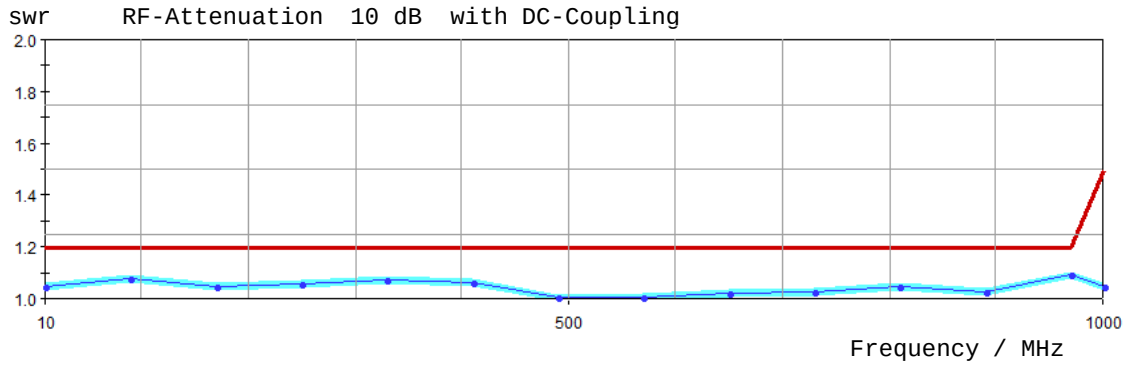
RF attenuation 0 dB, Input 2, DC coupled, preselector off, preamplifier off



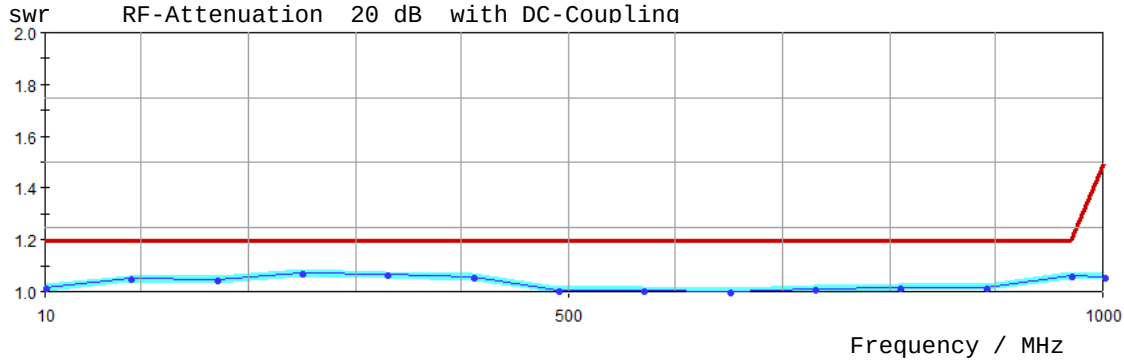
RF attenuation 5 dB, Input 2, DC coupled, preselector off, preamplifier off



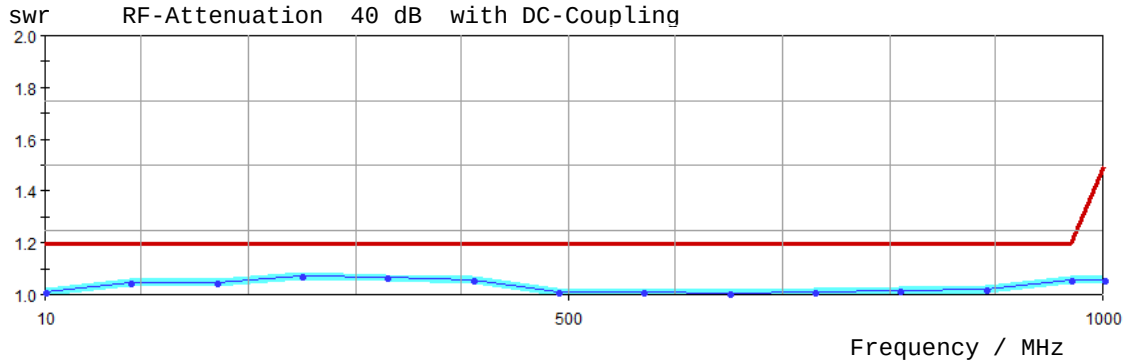
RF attenuation 10 dB, Input 2, DC coupled, preselector off, preamplifier off



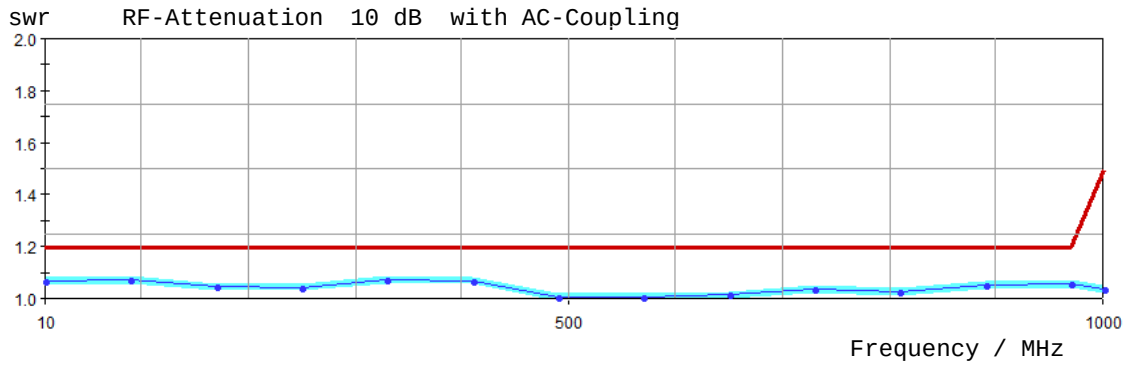
RF attenuation 20 dB, Input 2, DC coupled, preselector off, preamplifier off



RF attenuation 40 dB, Input 2, DC coupled, preselector off, preamplifier off



RF attenuation 10 dB, Input 2, AC coupled, preselector off, preamplifier off



42. Return Loss at the RF Input 2 with preselector

RF attenuation 0 dB, Input 2, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	2.00	1.14	0.05
1.008 MHz	2.00	1.52	0.05
2.007 MHz	2.00	1.52	0.05
3.006 MHz	2.00	1.54	0.05
4.005 MHz	2.00	1.57	0.05
5.005 MHz	2.00	1.60	0.05
6.004 MHz	2.00	1.61	0.05
7.003 MHz	2.00	1.62	0.05
8.002 MHz	2.00	1.60	0.05
9.002 MHz	2.00	1.57	0.05
10.000 MHz	2.00	1.52	0.05

RF attenuation 5 dB, Input 2, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.50	1.04	0.05
1.008 MHz	1.50	1.14	0.05
2.007 MHz	1.50	1.13	0.05
3.006 MHz	1.50	1.13	0.05
4.005 MHz	1.50	1.14	0.05
5.005 MHz	1.50	1.16	0.05
6.004 MHz	1.50	1.17	0.05
7.003 MHz	1.50	1.17	0.05
8.002 MHz	1.50	1.18	0.05
9.002 MHz	1.50	1.17	0.05
10.000 MHz	1.50	1.16	0.05

RF attenuation 10 dB, Input 2, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.02	0.05
1.008 MHz	1.20	1.05	0.05
2.007 MHz	1.20	1.03	0.05
3.006 MHz	1.20	1.03	0.05
4.005 MHz	1.20	1.04	0.05
5.005 MHz	1.20	1.05	0.05
6.004 MHz	1.20	1.06	0.05
7.003 MHz	1.20	1.07	0.05
8.002 MHz	1.20	1.07	0.05
9.002 MHz	1.20	1.08	0.05
10.000 MHz	1.20	1.07	0.05

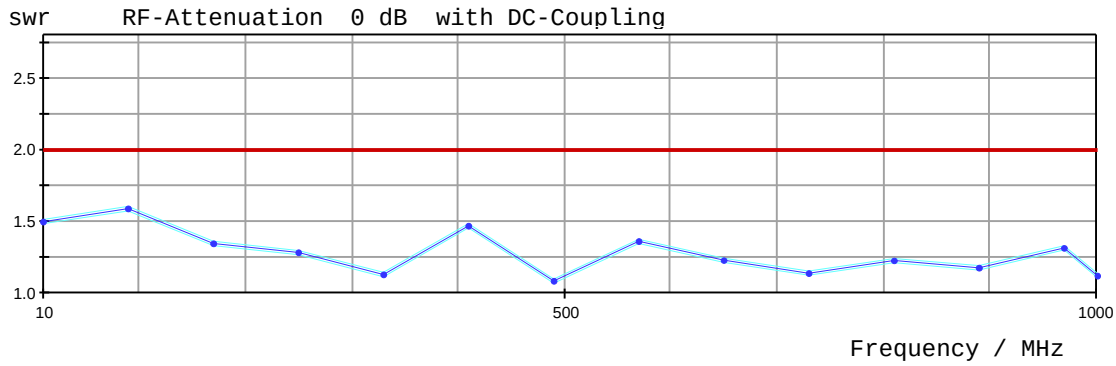
RF attenuation 20 dB, Input 2, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.01	0.05
1.008 MHz	1.20	1.02	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.02	0.05
5.005 MHz	1.20	1.02	0.05
6.004 MHz	1.20	1.02	0.05
7.003 MHz	1.20	1.03	0.05
8.002 MHz	1.20	1.03	0.05
9.002 MHz	1.20	1.03	0.05
10.000 MHz	1.20	1.03	0.05

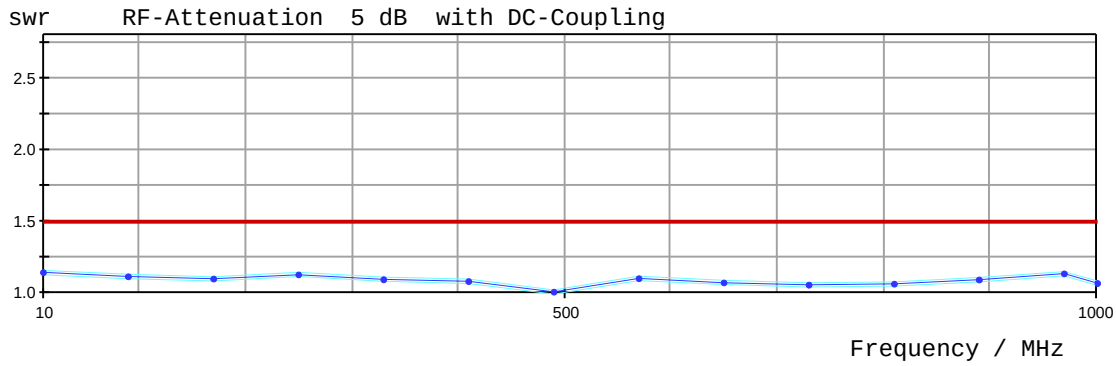
RF attenuation 40 dB, Input 2, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.01	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.02	0.05
5.005 MHz	1.20	1.02	0.05
6.004 MHz	1.20	1.02	0.05
7.003 MHz	1.20	1.02	0.05
8.002 MHz	1.20	1.02	0.05
9.002 MHz	1.20	1.03	0.05
10.000 MHz	1.20	1.03	0.05

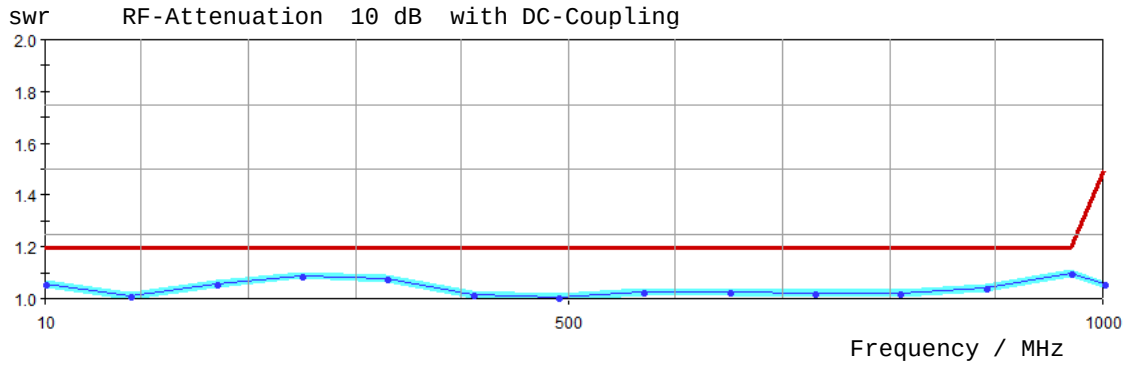
RF attenuation 0 dB, Input 2, DC coupled, preselector on, preamplifier off



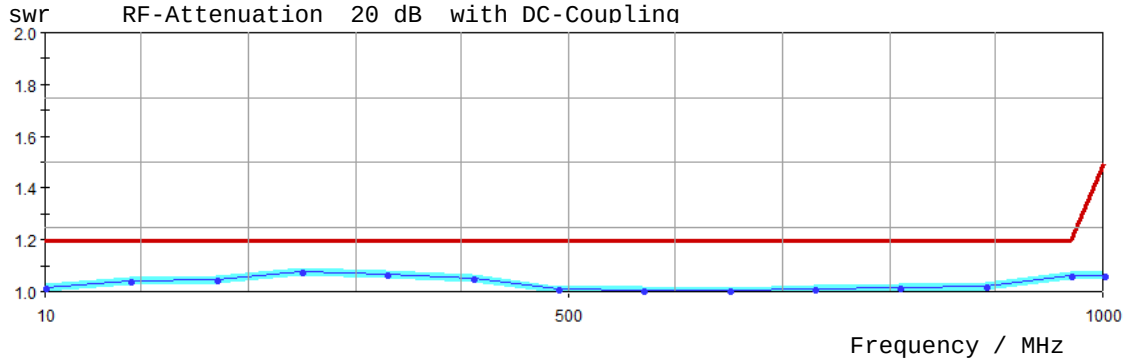
RF attenuation 5 dB, Input 2, DC coupled, preselector on, preamplifier off



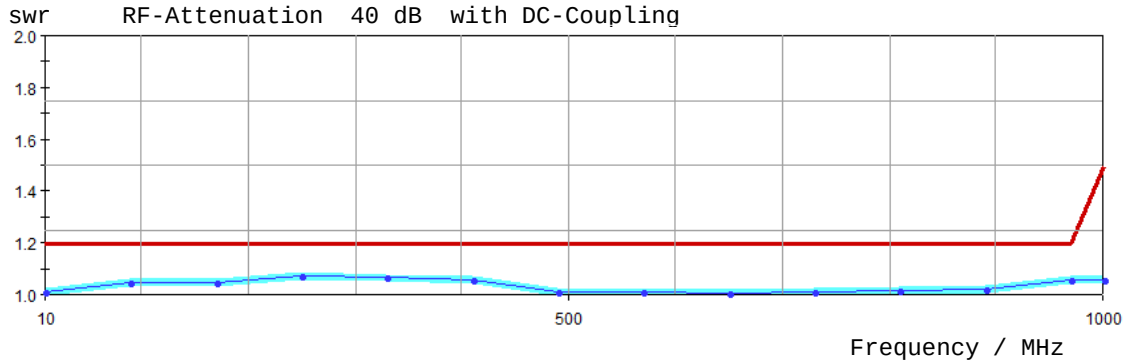
RF attenuation 10 dB, Input 2, DC coupled, preselector on, preamplifier off



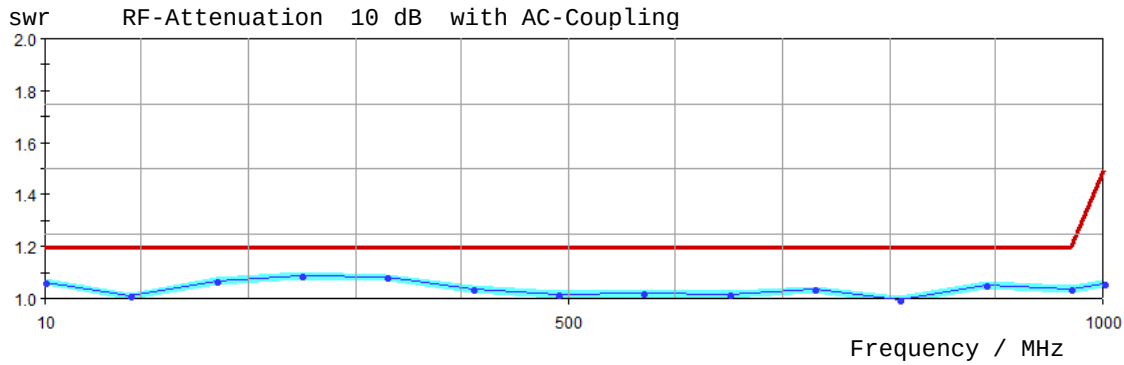
RF attenuation 20 dB, Input 2, DC coupled, preselector on, preamplifier off



RF attenuation 40 dB, Input 2, DC coupled, preselector on, preamplifier off



RF attenuation 10 dB, Input 2, AC coupled, preselector on, preamplifier off



43. Return Loss at the RF Input 2 with preselector and preamplifier

RF attenuation 0 dB, Input 2, DC preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	2.00	1.14	0.05
1.008 MHz	2.00	1.52	0.05
2.007 MHz	2.00	1.52	0.05
3.006 MHz	2.00	1.54	0.05
4.005 MHz	2.00	1.57	0.05
5.005 MHz	2.00	1.60	0.05
6.004 MHz	2.00	1.62	0.05
7.003 MHz	2.00	1.62	0.05
8.002 MHz	2.00	1.61	0.05
9.002 MHz	2.00	1.57	0.05
10.000 MHz	2.00	1.52	0.05

RF attenuation 5 dB, Input 2, DC preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.50	1.04	0.05
1.008 MHz	1.50	1.14	0.05
2.007 MHz	1.50	1.13	0.05
3.006 MHz	1.50	1.13	0.05
4.005 MHz	1.50	1.14	0.05
5.005 MHz	1.50	1.16	0.05
6.004 MHz	1.50	1.17	0.05
7.003 MHz	1.50	1.17	0.05
8.002 MHz	1.50	1.18	0.05
9.002 MHz	1.50	1.17	0.05
10.000 MHz	1.50	1.17	0.05

RF attenuation 10 dB, Input 2, DC preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.02	0.05
1.008 MHz	1.20	1.05	0.05
2.007 MHz	1.20	1.03	0.05
3.006 MHz	1.20	1.03	0.05
4.005 MHz	1.20	1.04	0.05
5.005 MHz	1.20	1.05	0.05
6.004 MHz	1.20	1.06	0.05
7.003 MHz	1.20	1.07	0.05
8.002 MHz	1.20	1.07	0.05
9.002 MHz	1.20	1.07	0.05
10.000 MHz	1.20	1.07	0.05

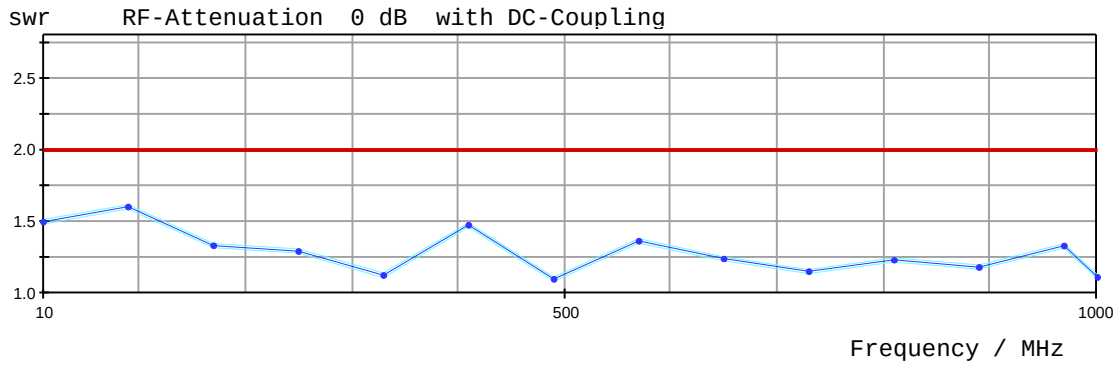
RF attenuation 20 dB, Input 2, DC preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.01	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.02	0.05
5.005 MHz	1.20	1.02	0.05
6.004 MHz	1.20	1.02	0.05
7.003 MHz	1.20	1.03	0.05
8.002 MHz	1.20	1.03	0.05
9.002 MHz	1.20	1.03	0.05
10.000 MHz	1.20	1.03	0.05

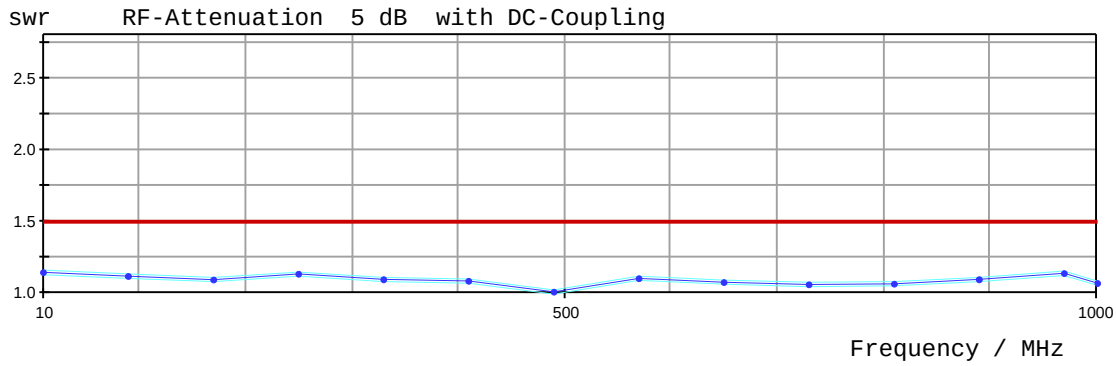
RF attenuation 40 dB, Input 2, DC preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.01	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.02	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.01	0.05
5.005 MHz	1.20	1.02	0.05
6.004 MHz	1.20	1.02	0.05
7.003 MHz	1.20	1.02	0.05
8.002 MHz	1.20	1.02	0.05
9.002 MHz	1.20	1.03	0.05
10.000 MHz	1.20	1.02	0.05

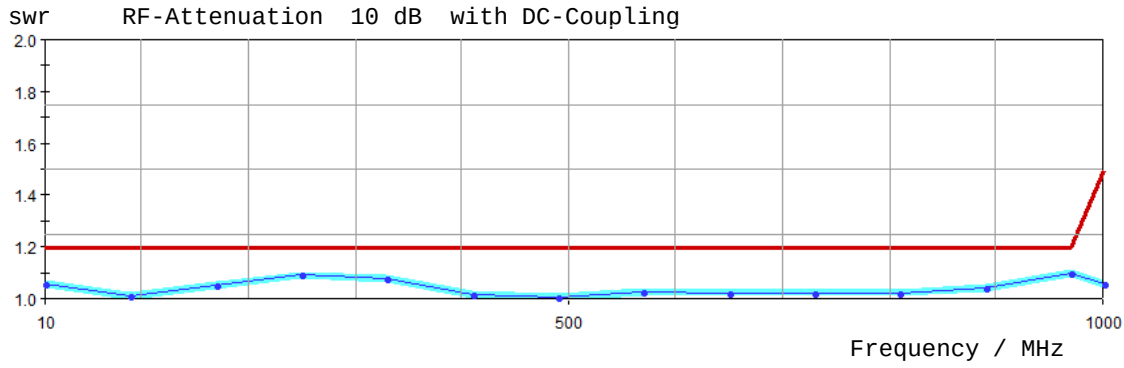
RF attenuation 0 dB, Input 2, DC preselector on, preamplifier on



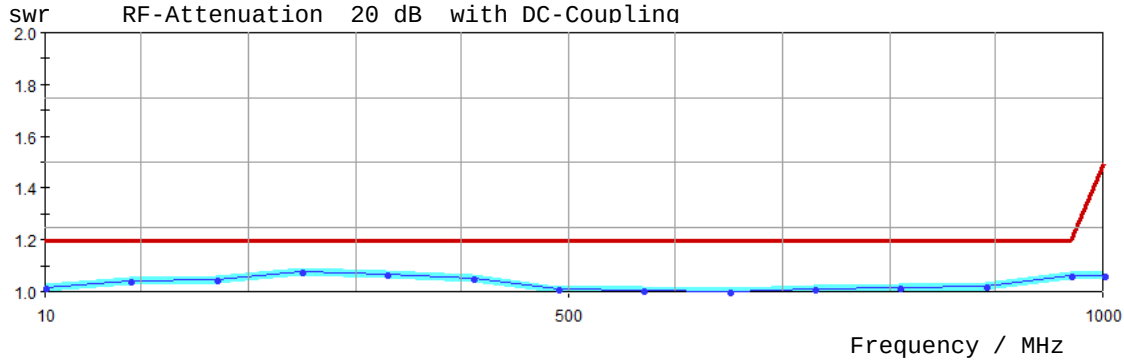
RF attenuation 5dB, Input 2, DC preselector on, preamplifier on



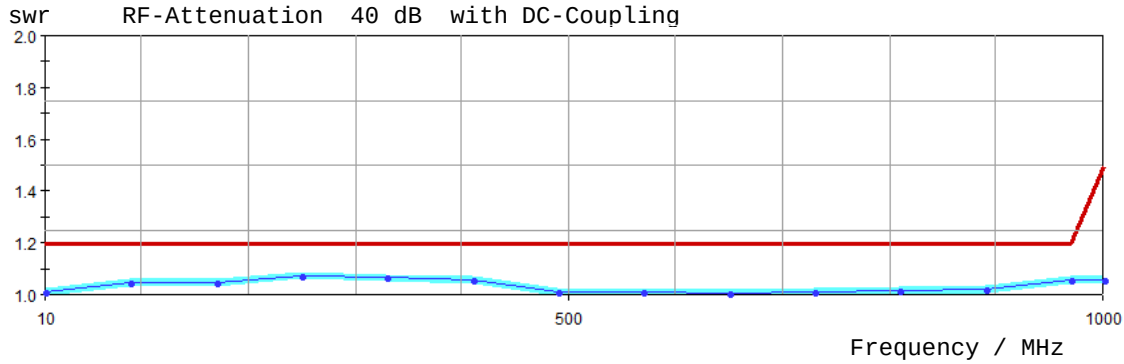
RF attenuation 10dB, Input 2, DC preselector on, preamplifier on



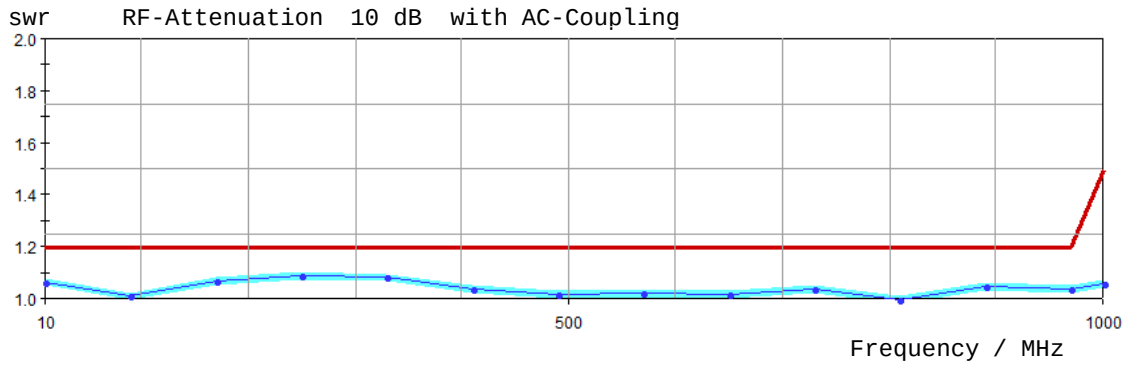
RF attenuation 20dB, Input 2, DC preselector on, preamplifier on



RF attenuation 40dB, Input 2, DC preselector on, preamplifier on



RF attenuation 10dB, Input 2, AC preselector on, preamplifier on



44. Detectors according CISPR 16-1-1 Ed. 5

44.1 Sine-wave voltage accuracy

Detector	Level Nominal /dBm	DL /dB	Actual /dB	MU /dB
Band A				
Fin = 9.05 kHz				
PK+	-10.0	1.00	-0.16	0.07
QPK	-10.0	1.00	-0.17	0.07
CAV	-10.0	1.00	-0.17	0.07
CRMS	-10.0	1.00	-0.17	0.07
Fin = 75.00 kHz				
PK+	-10.0	1.00	-0.15	0.07
QPK	-10.0	1.00	-0.15	0.07
CAV	-10.0	1.00	-0.15	0.07
CRMS	-10.0	1.00	-0.15	0.07
Fin = 149.95 kHz				
PK+	-10.0	1.00	-0.16	0.07
QPK	-10.0	1.00	-0.16	0.07
CAV	-10.0	1.00	-0.16	0.07
CRMS	-10.0	1.00	-0.16	0.07
Band B				
Fin = 0.15500 MHz				
PK+	-10.0	1.00	-0.09	0.07
QPK	-10.0	1.00	-0.10	0.07
CAV	-10.0	1.00	-0.10	0.07
CRMS	-10.0	1.00	-0.10	0.07
Fin = 15.00 MHz				
PK+	-10.0	1.00	-0.07	0.07
QPK	-10.0	1.00	-0.07	0.07
CAV	-10.0	1.00	-0.07	0.07
CRMS	-10.0	1.00	-0.07	0.07
Fin = 29.99500 MHz				
PK+	-10.0	1.00	-0.05	0.07
QPK	-10.0	1.00	-0.05	0.07
CAV	-10.0	1.00	-0.05	0.07
CRMS	-10.0	1.00	-0.05	0.07
Band C				
Fin = 30.03 MHz				
PK+	-10.0	0.80	0.01	0.07
QPK	-10.0	0.80	0.00	0.07
CAV	-10.0	0.80	0.00	0.07
CRMS	-10.0	0.80	0.00	0.07

Fin = 165.00 MHz

PK+	-10.0	0.80	-0.04	0.07
QPK	-10.0	0.80	-0.05	0.07
CAV	-10.0	0.80	-0.05	0.07
CRMS	-10.0	0.80	-0.05	0.07

Fin = 299.97 MHz

PK+	-10.0	0.80	0.03	0.07
QPK	-10.0	0.80	0.03	0.07
CAV	-10.0	0.80	0.03	0.07
CRMS	-10.0	0.80	0.03	0.07

Band D

Fin = 300.03 MHz

PK+	-10.0	0.80	0.03	0.07
QPK	-10.0	0.80	0.03	0.07
CAV	-10.0	0.80	0.03	0.07
CRMS	-10.0	0.80	0.03	0.07

Fin = 650.00 MHz

PK+	-10.0	0.80	-0.09	0.07
QPK	-10.0	0.80	-0.09	0.07
CAV	-10.0	0.80	-0.09	0.07
CRMS	-10.0	0.80	-0.09	0.07

Fin = 999.97 MHz

PK+	-10.0	0.80	0.06	0.07
QPK	-10.0	0.80	0.06	0.07
CAV	-10.0	0.80	0.06	0.07
CRMS	-10.0	0.80	0.06	0.07

Band E

Fin = 1000.25 MHz

PK+	-10.0	1.80	0.05	0.07
CAV	-10.0	1.80	0.04	0.07
CRMS	-10.0	1.80	0.04	0.07

Fin = 7999.75 MHz

PK+	-10.0	1.80	0.08	0.10
CAV	-10.0	1.80	0.08	0.10
CRMS	-10.0	1.80	0.08	0.10

44.2 Response to pulses

Peak and Quasipeak detector

Amplitude relationship

Band A

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 9.05 kHz					
25	Max peak	64.6 dBuV	67.6 dBuV	65.99 dBuV	0.30 dB
25	Quasipeak	58.5 dBuV	61.5 dBuV	59.80 dBuV	0.30 dB
Fin = 75.00 kHz					
25	Max peak	64.6 dBuV	67.6 dBuV	66.05 dBuV	0.30 dB
25	Quasipeak	58.5 dBuV	61.5 dBuV	59.91 dBuV	0.30 dB
Fin = 149.95 kHz					
25	Max peak	64.6 dBuV	67.6 dBuV	66.06 dBuV	0.30 dB
25	Quasipeak	58.5 dBuV	61.5 dBuV	59.92 dBuV	0.30 dB

Band B

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 0.15500 MHz					
100	Max peak	65.1 dBuV	68.1 dBuV	66.36 dBuV	0.30 dB
100	Quasipeak	58.5 dBuV	61.5 dBuV	59.62 dBuV	0.30 dB
Fin = 15.00000 MHz					
100	Max peak	65.1 dBuV	68.1 dBuV	66.59 dBuV	0.30 dB
100	Quasipeak	58.5 dBuV	61.5 dBuV	59.76 dBuV	0.30 dB
Fin = 29.99500 MHz					
100	Max peak	65.1 dBuV	68.1 dBuV	66.53 dBuV	0.30 dB
100	Quasipeak	58.5 dBuV	61.5 dBuV	59.69 dBuV	0.30 dB

Band C

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 30.03 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.89 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.65 dBuV	0.31 dB
Fin = 165.00 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.84 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.59 dBuV	0.31 dB
Fin = 299.97 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.92 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.70 dBuV	0.31 dB

Band D

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 300.03 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.91 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.69 dBuV	0.31 dB
Fin = 650.00 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.71 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.48 dBuV	0.31 dB
Fin = 999.97 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.96 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.75 dBuV	0.31 dB

Band E

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 1000.25 MHz						
50000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.37 dBuV	0.12 dB
Fin = 7999.75 MHz						
50000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.40 dBuV	0.15 dB

Quasipeak, variation with repetition frequency

Band A

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 9.05 kHz					
25	Reference			60.94 dBuV	
100		3.0 dB	5.0 dB	3.95 dB	0.05 dB
60		2.0 dB	4.0 dB	2.65 dB	0.05 dB
10		-5.0 dB	-3.0 dB	-3.92 dB	0.05 dB
5		-9.0 dB	-6.0 dB	-7.82 dB	0.05 dB
2		-15.0 dB	-11.0 dB	-13.62 dB	0.05 dB
1		-19.0 dB	-15.0 dB	-17.14 dB	0.05 dB
single		-21.0 dB	-17.0 dB	-19.05 dB	0.05 dB
Fin = 75.00 kHz					
25	Reference			60.90 dBuV	
100		3.0 dB	5.0 dB	3.83 dB	0.05 dB
60		2.0 dB	4.0 dB	2.66 dB	0.05 dB
10		-5.0 dB	-3.0 dB	-3.91 dB	0.05 dB
5		-9.0 dB	-6.0 dB	-7.81 dB	0.05 dB
2		-15.0 dB	-11.0 dB	-13.61 dB	0.05 dB
1		-19.0 dB	-15.0 dB	-17.22 dB	0.05 dB
single		-21.0 dB	-17.0 dB	-19.06 dB	0.05 dB
Fin = 149.95 kHz					
25	Reference			60.88 dBuV	
100		3.0 dB	5.0 dB	3.81 dB	0.05 dB
60		2.0 dB	4.0 dB	2.67 dB	0.05 dB
10		-5.0 dB	-3.0 dB	-3.91 dB	0.05 dB
5		-9.0 dB	-6.0 dB	-7.80 dB	0.05 dB
2		-15.0 dB	-11.0 dB	-13.61 dB	0.05 dB
1		-19.0 dB	-15.0 dB	-17.21 dB	0.05 dB
single		-21.0 dB	-17.0 dB	-19.08 dB	0.05 dB

Band B

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 0.15500 MHz					
100	Reference			60.26 dBuV	
20		-7.5 dB	-5.5 dB	-6.98 dB	0.05 dB
10		-11.5 dB	-8.5 dB	-11.18 dB	0.05 dB
2		-22.5 dB	-18.5 dB	-21.58 dB	0.05 dB
1		-24.5 dB	-20.5 dB	-22.72 dB	0.05 dB
single		-25.5 dB	-21.5 dB	-22.95 dB	0.05 dB
Fin = 15.00000 MHz					
100	Reference			59.87 dBuV	
20		-7.5 dB	-5.5 dB	-7.03 dB	0.05 dB
10		-11.5 dB	-8.5 dB	-11.21 dB	0.05 dB
2		-22.5 dB	-18.5 dB	-21.63 dB	0.05 dB
1		-24.5 dB	-20.5 dB	-22.92 dB	0.05 dB
single		-25.5 dB	-21.5 dB	-23.18 dB	0.05 dB
Fin = 29.99500 MHz					
100	Reference			60.43 dBuV	
20		-7.5 dB	-5.5 dB	-7.02 dB	0.05 dB
10		-11.5 dB	-8.5 dB	-11.21 dB	0.05 dB
2		-22.5 dB	-18.5 dB	-21.71 dB	0.05 dB
1		-24.5 dB	-20.5 dB	-22.82 dB	0.05 dB
single		-25.5 dB	-21.5 dB	-22.92 dB	0.05 dB

Band C

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 30.03 MHz					
100	Reference			50.15 dBuV	
20		-10.0 dB	-8.0 dB	-9.51 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.43 dB	0.05 dB
2		-28.0 dB	-24.0 dB	-26.67 dB	0.05 dB
1		-30.5 dB	-26.5 dB	-29.89 dB	0.05 dB
single		-33.5 dB	-29.5 dB	-30.08 dB	0.05 dB
Fin = 165.00 MHz					
100	Reference			49.75 dBuV	
20		-10.0 dB	-8.0 dB	-9.48 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.39 dB	0.05 dB
2		-28.0 dB	-24.0 dB	-26.64 dB	0.05 dB
1		-30.5 dB	-26.5 dB	-30.21 dB	0.05 dB
single		-33.5 dB	-29.5 dB	-30.41 dB	0.05 dB
Fin = 299.97 MHz					
100	Reference			49.54 dBuV	
20		-10.0 dB	-8.0 dB	-9.47 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.42 dB	0.05 dB
2		-28.0 dB	-24.0 dB	-26.62 dB	0.05 dB
1		-30.5 dB	-26.5 dB	-30.32 dB	0.05 dB
single		-33.5 dB	-29.5 dB	-30.52 dB	0.05 dB

Band D

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 300.03 MHz					
100	Reference			49.55 dBuV	
20		-10.0 dB	-8.0 dB	-9.48 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.41 dB	0.05 dB
Fin = 650.00 MHz					
100	Reference			49.74 dBuV	
20		-10.0 dB	-8.0 dB	-9.46 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.41 dB	0.05 dB
Fin = 999.97 MHz					
100	Reference			49.56 dBuV	
20		-10.0 dB	-8.0 dB	-9.45 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.38 dB	0.05 dB

Measurement at 1 kHz pulse frequency

Band B

fp/Hz		DLL	DUL	actual	MU
Fin = 0.15500 MHz					
100	Reference			60.02 dBuV	
1000		3.5 dB	5.5 dB	4.57 dB	0.05 dB
Fin = 15.00000 MHz					
100	Reference			59.77 dBuV	
1000		3.5 dB	5.5 dB	4.64 dB	0.05 dB
Fin = 29.99500 MHz					
100	Reference			59.17 dBuV	
1000		3.5 dB	5.5 dB	4.64 dB	0.05 dB

Band C

fp/Hz		DLL	DUL	actual	MU
Fin = 30.03 MHz					
100	Reference			38.69 dBuV	
1000		7.0 dB	9.0 dB	8.49 dB	0.05 dB
Fin = 165.00 MHz					
100	Reference			38.61 dBuV	
1000		7.0 dB	9.0 dB	8.53 dB	0.05 dB
Fin = 299.97 MHz					
100	Reference			39.06 dBuV	
1000		7.0 dB	9.0 dB	8.49 dB	0.05 dB

Band D

fp/Hz		DLL	DUL	actual	MU
Fin = 300.03 MHz					
100	Reference			39.05 dBuV	
1000		7.0 dB	9.0 dB	8.49 dB	0.05 dB
Fin = 650.00 MHz					
100	Reference			38.65 dBuV	
1000		7.0 dB	9.0 dB	8.47 dB	0.05 dB
Fin = 999.97 MHz					
100	Reference			37.69 dBuV	
1000		7.0 dB	9.0 dB	8.44 dB	0.05 dB

CISPR Average Detector

Amplitude relationship

Band A

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 9.05 kHz						
25	200	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	60.09 dBuV	0.12 dB
25	200	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	60.09 dBuV	0.12 dB
Fin = 75.00 kHz						
25	200	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	59.99 dBuV	0.12 dB
25	200	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	59.99 dBuV	0.12 dB
Fin = 149.95 kHz						
25	200	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	59.98 dBuV	0.12 dB
25	200	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	59.98 dBuV	0.12 dB

Band B

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 0.15500 MHz						
500	20	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	60.07 dBuV	0.12 dB
500	20	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	60.07 dBuV	0.12 dB
Fin = 15.00000 MHz						
500	20	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	60.01 dBuV	0.12 dB
500	20	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	60.01 dBuV	0.12 dB
Fin = 29.99500 MHz						
500	20	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	60.02 dBuV	0.12 dB
500	20	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	60.02 dBuV	0.12 dB

Band C

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 30.03 MHz							
5000	2	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	59.89 dBuV	0.12 dB	
5000	2	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	59.89 dBuV	0.12 dB	
Fin = 165.00 MHz							
5000	2	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	59.89 dBuV	0.12 dB	
5000	2	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	59.89 dBuV	0.12 dB	
Fin = 299.97 MHz							
5000	2	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	59.87 dBuV	0.12 dB	
5000	2	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	59.87 dBuV	0.12 dB	

Band D

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 300.03 MHz							
5000	2	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	59.87 dBuV	0.12 dB	
5000	2	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	59.87 dBuV	0.12 dB	
Fin = 650.00 MHz							
5000	2	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	59.88 dBuV	0.12 dB	
5000	2	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	59.88 dBuV	0.12 dB	
Fin = 999.97 MHz							
5000	2	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	59.88 dBuV	0.12 dB	
5000	2	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	59.88 dBuV	0.12 dB	

Band E

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 1000.25 MHz							
50000	0.2	60.00		58.5 dBuV	61.5 dBuV	60.09 dBuV	0.12 dB
Fin = 7999.75 MHz							
50000	0.2	60.00		58.5 dBuV	61.5 dBuV	60.12 dBuV	0.15 dB

CISPR-average, variation with repetition frequency

Band A

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 9.05 kHz							
70	200	Reference				68.56 dBuV	
35	200	62.56	-6.0 dB	-1.0 dB	2.0 dB	0.17 dB	0.05 dB
17.5	200	56.56	-12.0 dB	-1.0 dB	2.0 dB	0.34 dB	0.05 dB
Fin = 75.00 kHz							
70	200	Reference				68.72 dBuV	
35	200	62.72	-6.0 dB	-1.0 dB	2.0 dB	0.00 dB	0.05 dB
17.5	200	56.72	-12.0 dB	-1.0 dB	2.0 dB	0.04 dB	0.05 dB

Fin = 149.95 kHz

70	200	Reference				68.74 dBuV	
35	200	62.74	-6.0 dB	-1.0 dB	2.0 dB	-0.01 dB	0.05 dB
17.5	200	56.74	-12.0 dB	-1.0 dB	2.0 dB	0.00 dB	0.05 dB

Band B

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 0.15500 MHz							
3180	20	Reference				76.02 dBuV	
1590	20	70.02	-6.0 dB	-1.0 dB	2.0 dB	-0.02 dB	0.05 dB
795	20	64.02	-12.0 dB	-1.0 dB	2.0 dB	-0.04 dB	0.05 dB
398	20	58.02	-18.0 dB	-1.0 dB	2.0 dB	-0.04 dB	0.05 dB
Fin = 15.00000 MHz							
3180	20	Reference				76.00 dBuV	
1590	20	70.00	-6.0 dB	-1.0 dB	2.0 dB	-0.02 dB	0.05 dB
795	20	64.00	-12.0 dB	-1.0 dB	2.0 dB	-0.04 dB	0.05 dB
398	20	58.00	-18.0 dB	-1.0 dB	2.0 dB	-0.05 dB	0.05 dB
Fin = 29.99500 MHz							
3180	20	Reference				76.04 dBuV	
1590	20	70.04	-6.0 dB	-1.0 dB	2.0 dB	-0.02 dB	0.05 dB
795	20	64.04	-12.0 dB	-1.0 dB	2.0 dB	-0.04 dB	0.05 dB
398	20	58.04	-18.0 dB	-1.0 dB	2.0 dB	-0.04 dB	0.05 dB

Band C

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 30.03 MHz							
42400	2	Reference				78.59 dBuV	
21200	2	72.59	-6.0 dB	-1.0 dB	2.0 dB	-0.03 dB	0.05 dB
10600	2	66.59	-12.0 dB	-1.0 dB	2.0 dB	-0.05 dB	0.05 dB
5300	2	60.59	-18.0 dB	-1.0 dB	2.0 dB	-0.06 dB	0.05 dB
2650	2	54.59	-24.0 dB	-1.0 dB	2.0 dB	-0.05 dB	0.05 dB
Fin = 165.00 MHz							
42400	2	Reference				78.54 dBuV	
21200	2	72.54	-6.0 dB	-1.0 dB	2.0 dB	-0.02 dB	0.05 dB
10600	2	66.54	-12.0 dB	-1.0 dB	2.0 dB	-0.05 dB	0.05 dB
5300	2	60.54	-18.0 dB	-1.0 dB	2.0 dB	-0.07 dB	0.05 dB
2650	2	54.54	-24.0 dB	-1.0 dB	2.0 dB	-0.07 dB	0.05 dB
Fin = 299.97 MHz							
42400	2	Reference				78.59 dBuV	
21200	2	72.59	-6.0 dB	-1.0 dB	2.0 dB	-0.03 dB	0.05 dB
10600	2	66.59	-12.0 dB	-1.0 dB	2.0 dB	-0.06 dB	0.05 dB
5300	2	60.59	-18.0 dB	-1.0 dB	2.0 dB	-0.08 dB	0.05 dB
2650	2	54.59	-24.0 dB	-1.0 dB	2.0 dB	-0.09 dB	0.05 dB

Band D

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 300.03 MHz							
42400	2	Reference				78.60 dBuV	
21200	2	72.60	-6.0 dB	-1.0 dB	2.0 dB	-0.02 dB	0.05 dB
10600	2	66.60	-12.0 dB	-1.0 dB	2.0 dB	-0.05 dB	0.05 dB
5300	2	60.60	-18.0 dB	-1.0 dB	2.0 dB	-0.07 dB	0.05 dB
2650	2	54.60	-24.0 dB	-1.0 dB	2.0 dB	-0.08 dB	0.05 dB
Fin = 650.00 MHz							
42400	2	Reference				78.50 dBuV	
21200	2	72.50	-6.0 dB	-1.0 dB	2.0 dB	-0.02 dB	0.05 dB
10600	2	66.50	-12.0 dB	-1.0 dB	2.0 dB	-0.04 dB	0.05 dB
5300	2	60.50	-18.0 dB	-1.0 dB	2.0 dB	-0.06 dB	0.05 dB
2650	2	54.50	-24.0 dB	-1.0 dB	2.0 dB	-0.06 dB	0.05 dB
Fin = 999.97 MHz							
42400	2	Reference				78.65 dBuV	
21200	2	72.65	-6.0 dB	-1.0 dB	2.0 dB	-0.02 dB	0.05 dB
10600	2	66.65	-12.0 dB	-1.0 dB	2.0 dB	-0.04 dB	0.05 dB
5300	2	60.65	-18.0 dB	-1.0 dB	2.0 dB	-0.05 dB	0.05 dB
2650	2	54.65	-24.0 dB	-1.0 dB	2.0 dB	-0.06 dB	0.05 dB

Band E

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 1000.25 MHz							
353500	0.2	Reference				77.07 dBuV	
176750	0.2	71.07	-6.0 dB	-1.0 dB	2.0 dB	-0.03 dB	0.05 dB
17675	0.2	51.07	-26.0 dB	-1.0 dB	2.0 dB	+0.11 dB	0.05 dB
Fin = 7999.75 MHz							
353500	0.2	Reference				77.07 dBuV	
176750	0.2	71.07	-6.0 dB	-1.0 dB	2.0 dB	-0.01 dB	0.05 dB
17675	0.2	51.07	-26.0 dB	-1.0 dB	2.0 dB	+0.28 dB	0.05 dB

Note: The limits of -1,0 dB/+2,0 dB are used to comply with both CISPR 16-1-1:2014 (Ed.3.2) / CISPR 16-1-1:2015 (Ed.4) and CISPR 16-1-1:2019 (Ed.5) as the common tolerance of both requirements.

Response to intermittent disturbance

fp /Hz	width /ms	weighting /dB	DLL /dB	DUL /dB	actual /dB	MU /dB
Band A						
Fin = 9.05 kHz						
0.625	160	-9.0	-1.00	1.00	0.08	0.05
Fin = 75.00 kHz						
0.625	160	-9.0	-1.00	1.00	0.08	0.05
Fin = 149.95 kHz						
0.625	160	-9.0	-1.00	1.00	0.08	0.05

Band B

Fin = 0.15500 MHz
0.625 160 -9.0 -1.00 1.00 0.08 0.05

Fin = 15.00000 MHz
0.625 160 -9.0 -1.00 1.00 0.09 0.05

Fin = 29.99500 MHz
0.625 160 -9.0 -1.00 1.00 0.09 0.05

Band C

Fin = 30.03 MHz
0.625 100 -9.0 -1.00 1.00 0.13 0.05

Fin = 165.00 MHz
0.625 100 -9.0 -1.00 1.00 0.12 0.05

Fin = 299.97 MHz
0.625 100 -9.0 -1.00 1.00 0.12 0.05

Band D

Fin = 300.03 MHz
0.625 100 -9.0 -1.00 1.00 0.12 0.05

Fin = 650.00 MHz
0.625 100 -9.0 -1.00 1.00 0.12 0.05

Fin = 999.97 MHz
0.625 100 -9.0 -1.00 1.00 0.13 0.05

Band E

Fin = 1000.25 MHz
0.625 100 -9.0 -1.00 1.00 0.11 0.05

Fin = 7999.75 MHz
0.625 100 -9.0 -1.00 1.00 0.11 0.05

RMS-Average Detector

Amplitude relationship

Band A

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 9.05 kHz						
25	200	60.00	58.5 dBuV	61.5 dBuV	59.80 dBuV	0.10 dB
Fin = 75.00 kHz						
25	200	60.00	58.5 dBuV	61.5 dBuV	59.89 dBuV	0.10 dB
Fin = 149.95 kHz						
25	200	60.00	58.5 dBuV	61.5 dBuV	59.90 dBuV	0.10 dB

Band B

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 0.15500 MHz						
1000	20	60.00	58.5 dBuV	61.5 dBuV	59.61 dBuV	0.10 dB
Fin = 15.00000 MHz						
1000	20	60.00	58.5 dBuV	61.5 dBuV	59.67 dBuV	0.10 dB
Fin = 29.99500 MHz						
1000	20	60.00	58.5 dBuV	61.5 dBuV	59.71 dBuV	0.10 dB

Band C

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 30.03 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.76 dBuV	0.10 dB
Fin = 165.00 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.75 dBuV	0.10 dB
Fin = 299.97 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.73 dBuV	0.10 dB

Band D

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 300.03 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.72 dBuV	0.10 dB
Fin = 650.00 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.69 dBuV	0.10 dB
Fin = 999.97 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.68 dBuV	0.10 dB

Band E

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 1000.25 MHz						
1000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.06 dBuV	0.12 dB
Fin = 7999.75 MHz						
1000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.22 dBuV	0.15 dB

Variation with repetition frequency

Band A

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 9.05 kHz							
25	200	Reference				59.62 dBuV	
100	200	65.62	6.0 dB	-0.6 dB	0.6 dB	0.02 dB	0.05 dB
10	200	55.62	-4.0 dB	-0.4 dB	0.4 dB	0.04 dB	0.05 dB
5	200	50.62	-9.0 dB	-0.7 dB	0.7 dB	-0.35 dB	0.05 dB
Fin = 75.00 kHz							
25	200	Reference				59.73 dBuV	
100	200	65.73	6.0 dB	-0.6 dB	0.6 dB	0.07 dB	0.05 dB
10	200	55.73	-4.0 dB	-0.4 dB	0.4 dB	0.03 dB	0.05 dB
5	200	50.73	-9.0 dB	-0.7 dB	0.7 dB	-0.50 dB	0.05 dB
Fin = 149.95 kHz							
25	200	Reference				59.74 dBuV	
100	200	65.74	6.0 dB	-0.6 dB	0.6 dB	0.06 dB	0.05 dB
10	200	55.74	-4.0 dB	-0.4 dB	0.4 dB	0.02 dB	0.05 dB
5	200	50.74	-9.0 dB	-0.7 dB	0.7 dB	-0.56 dB	0.05 dB

Band B

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 0.15500 MHz							
1000	20	Reference				59.78 dBuV	
316	20	54.78	-5.0 dB	-0.5 dB	0.5 dB	-0.25 dB	0.05 dB
100	20	49.78	-10.0 dB	-1.0 dB	1.0 dB	-0.01 dB	0.05 dB
32	20	44.78	-15.0 dB	-1.5 dB	1.5 dB	-0.09 dB	0.05 dB
25	20	43.78	-16.0 dB	-1.6 dB	1.6 dB	-0.09 dB	0.05 dB
10	20	39.78	-20.0 dB	-2.0 dB	2.0 dB	-0.04 dB	0.05 dB
5	20	34.78	-25.0 dB	-2.3 dB	2.3 dB	-0.59 dB	0.05 dB
Fin = 15.00000 MHz							
1000	20	Reference				59.86 dBuV	
316	20	54.86	-5.0 dB	-0.5 dB	0.5 dB	-0.01 dB	0.05 dB
100	20	49.86	-10.0 dB	-1.0 dB	1.0 dB	-0.01 dB	0.05 dB
32	20	44.86	-15.0 dB	-1.5 dB	1.5 dB	0.02 dB	0.05 dB
25	20	43.86	-16.0 dB	-1.6 dB	1.6 dB	-0.09 dB	0.05 dB
10	20	39.86	-20.0 dB	-2.0 dB	2.0 dB	-0.05 dB	0.05 dB
5	20	34.86	-25.0 dB	-2.3 dB	2.3 dB	-0.62 dB	0.05 dB
Fin = 29.99500 MHz							
1000	20	Reference				59.92 dBuV	
316	20	54.92	-5.0 dB	-0.5 dB	0.5 dB	-0.01 dB	0.05 dB
100	20	49.92	-10.0 dB	-1.0 dB	1.0 dB	-0.01 dB	0.05 dB
32	20	44.92	-15.0 dB	-1.5 dB	1.5 dB	0.02 dB	0.05 dB
25	20	43.92	-16.0 dB	-1.6 dB	1.6 dB	-0.09 dB	0.05 dB
10	20	39.92	-20.0 dB	-2.0 dB	2.0 dB	-0.04 dB	0.05 dB
5	20	34.92	-25.0 dB	-2.3 dB	2.3 dB	-0.61 dB	0.05 dB

Band C

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 30.03 MHz							
1000	2	Reference				59.92 dBuV	
10000	2	69.92	+10.0 dB	-1.0 dB	1.0 dB	0.01 dB	0.05 dB
316	2	54.92	-5.0 dB	-0.5 dB	0.5 dB	-0.03 dB	0.05 dB
100	2	49.92	-10.0 dB	-1.0 dB	1.0 dB	-0.03 dB	0.05 dB
32	2	39.92	-20.0 dB	-2.0 dB	2.0 dB	0.22 dB	0.05 dB
Fin = 165.00 MHz							
1000	2	Reference				59.85 dBuV	
10000	2	69.85	+10.0 dB	-1.0 dB	1.0 dB	0.02 dB	0.05 dB
316	2	54.85	-5.0 dB	-0.5 dB	0.5 dB	-0.02 dB	0.05 dB
100	2	49.85	-10.0 dB	-1.0 dB	1.0 dB	-0.02 dB	0.05 dB
32	2	39.85	-20.0 dB	-2.0 dB	2.0 dB	0.21 dB	0.05 dB
Fin = 299.97 MHz							
1000	2	Reference				59.91 dBuV	
10000	2	69.91	+10.0 dB	-1.0 dB	1.0 dB	0.02 dB	0.05 dB
316	2	54.91	-5.0 dB	-0.5 dB	0.5 dB	-0.03 dB	0.05 dB
100	2	49.91	-10.0 dB	-1.0 dB	1.0 dB	-0.03 dB	0.05 dB
32	2	39.91	-20.0 dB	-2.0 dB	2.0 dB	0.20 dB	0.05 dB

Band D

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 300.03 MHz							
1000	2	Reference				59.91 dBuV	
10000	2	69.91	+10.0 dB	-1.0 dB	1.0 dB	0.02 dB	0.05 dB
316	2	54.91	-5.0 dB	-0.5 dB	0.5 dB	-0.02 dB	0.05 dB
100	2	49.91	-10.0 dB	-1.0 dB	1.0 dB	-0.02 dB	0.05 dB
32	2	39.91	-20.0 dB	-2.0 dB	2.0 dB	0.20 dB	0.05 dB
Fin = 650.00 MHz							
1000	2	Reference				59.80 dBuV	
10000	2	69.80	+10.0 dB	-1.0 dB	1.0 dB	0.02 dB	0.05 dB
316	2	54.80	-5.0 dB	-0.5 dB	0.5 dB	-0.02 dB	0.05 dB
100	2	49.80	-10.0 dB	-1.0 dB	1.0 dB	-0.02 dB	0.05 dB
32	2	39.80	-20.0 dB	-2.0 dB	2.0 dB	0.26 dB	0.05 dB
Fin = 999.97 MHz							
1000	2	Reference				59.91 dBuV	
10000	2	69.91	+10.0 dB	-1.0 dB	1.0 dB	0.03 dB	0.05 dB
316	2	54.91	-5.0 dB	-0.5 dB	0.5 dB	-0.01 dB	0.05 dB
100	2	49.91	-10.0 dB	-1.0 dB	1.0 dB	-0.01 dB	0.05 dB
32	2	39.91	-20.0 dB	-2.0 dB	2.0 dB	0.21 dB	0.05 dB

Band E

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 1000.25 MHz							
1000	0.2	Reference				60.22 dBuV	
100000	0.2	80.22	+20.0 dB	-2.0 dB	2.0 dB	0.05 dB	0.05 dB
10000	0.2	70.22	+10.0 dB	-1.0 dB	1.0 dB	0.03 dB	0.05 dB
316	0.2	50.22	-10.0 dB	-1.0 dB	1.0 dB	0.14 dB	0.05 dB
Fin = 7999.75 MHz							
1000	0.2	Reference				60.29 dBuV	
100000	0.2	80.29	+20.0 dB	-2.0 dB	2.0 dB	0.00 dB	0.05 dB
10000	0.2	70.29	+10.0 dB	-1.0 dB	1.0 dB	0.00 dB	0.05 dB
316	0.2	50.29	-10.0 dB	-1.0 dB	1.0 dB	0.26 dB	0.05 dB

Response to intermittent disturbance

fp /Hz	width /ms	weighting /dB	DLL /dB	DUL /dB	actual /dB	MU /dB
Band A						
Fin = 9.05 kHz						
0.625	160	-7.9	-1.00	1.00	-0.04	0.05
Fin = 75.00 kHz						
0.625	160	-7.9	-1.00	1.00	-0.05	0.05
Fin = 149.95 kHz						
0.625	160	-7.9	-1.00	1.00	-0.04	0.05
Band B						
Fin = 0.15500 MHz						
0.625	160	-7.9	-1.00	1.00	-0.16	0.05
Fin = 15.00000 MHz						
0.625	160	-7.9	-1.00	1.00	-0.16	0.05
Fin = 29.99500 MHz						
0.625	160	-7.9	-1.00	1.00	-0.16	0.05
Band C						
Fin = 30.03 MHz						
0.625	100	-9.0	-1.00	1.00	-0.16	0.05
Fin = 165.00 MHz						
0.625	100	-9.0	-1.00	1.00	-0.16	0.05
Fin = 299.97 MHz						
0.625	100	-9.0	-1.00	1.00	-0.15	0.05
Band D						
Fin = 300.03 MHz						
0.625	100	-9.0	-1.00	1.00	-0.15	0.05
Fin = 650.00 MHz						
0.625	100	-9.0	-1.00	1.00	-0.15	0.05
Fin = 999.97 MHz						
0.625	100	-9.0	-1.00	1.00	-0.15	0.05

Band E

Fin = 1000.25MHz

0.625	100	-9.0		-1.00	1.00	0.10	0.05

Fin = 7999.75MHz

0.625	100	-9.0		-1.00	1.00	0.10	0.05

45. Detectors according CISPR 16-1-1 Ed. 5 Time-Domain Scan (K53)

45.1 Sine-wave voltage accuracy

Detector	Level Nominal /dBm	DL /dB	Actual /dB	MU /dB
Band A				
Fin = 9.05 kHz				
PK+	-10.0	1.00	-0.37	0.07
QPK	-10.0	1.00	-0.38	0.07
CAV	-10.0	1.00	-0.38	0.07
CRMS	-10.0	1.00	-0.38	0.07
Fin = 75.00 kHz				
PK+	-10.0	1.00	-0.17	0.07
QPK	-10.0	1.00	-0.17	0.07
CAV	-10.0	1.00	-0.17	0.07
CRMS	-10.0	1.00	-0.17	0.07
Fin = 149.95 kHz				
PK+	-10.0	1.00	-0.17	0.07
QPK	-10.0	1.00	-0.17	0.07
CAV	-10.0	1.00	-0.17	0.07
CRMS	-10.0	1.00	-0.17	0.07
Band B				
Fin = 0.15500 MHz				
PK+	-10.0	1.00	-0.10	0.07
QPK	-10.0	1.00	-0.11	0.07
CAV	-10.0	1.00	-0.11	0.07
CRMS	-10.0	1.00	-0.11	0.07
Fin = 15.00000MHz				
PK+	-10.0	1.00	-0.08	0.07
QPK	-10.0	1.00	-0.08	0.07
CAV	-10.0	1.00	-0.08	0.07
CRMS	-10.0	1.00	-0.08	0.07
Fin = 29.99500MHz				
PK+	-10.0	1.00	-0.05	0.07
QPK	-10.0	1.00	-0.06	0.07
CAV	-10.0	1.00	-0.06	0.07
CRMS	-10.0	1.00	-0.06	0.07

Band C

Fin = 30.03 MHz

PK+	-10.0	0.80	-0.14	0.07
QPK	-10.0	0.80	-0.17	0.07
CAV	-10.0	0.80	-0.18	0.07
CRMS	-10.0	0.80	-0.18	0.07

Fin = 165.00 MHz

PK+	-10.0	0.80	0.18	0.07
QPK	-10.0	0.80	-0.04	0.07
CAV	-10.0	0.80	-0.04	0.07
CRMS	-10.0	0.80	-0.04	0.07

Fin = 299.97 MHz

PK+	-10.0	0.80	0.37	0.07
QPK	-10.0	0.80	0.16	0.07
CAV	-10.0	0.80	0.16	0.07
CRMS	-10.0	0.80	0.16	0.07

Band D

Fin = 300.03 MHz

PK+	-10.0	0.80	0.23	0.07
QPK	-10.0	0.80	0.22	0.07
CAV	-10.0	0.80	0.22	0.07
CRMS	-10.0	0.80	0.22	0.07

Fin = 650.00 MHz

PK+	-10.0	0.80	0.08	0.07
QPK	-10.0	0.80	0.08	0.07
CAV	-10.0	0.80	0.08	0.07
CRMS	-10.0	0.80	0.08	0.07

Fin = 999.97 MHz

PK+	-10.0	0.80	0.17	0.07
QPK	-10.0	0.80	0.16	0.07
CAV	-10.0	0.80	0.16	0.07
CRMS	-10.0	0.80	0.16	0.07

Band E

Fin = 1000.25 MHz

PK+	-10.0	1.80	0.08	0.07
CAV	-10.0	1.80	0.06	0.07
CRMS	-10.0	1.80	0.06	0.07

Fin = 7999.75 MHz

PK+	-10.0	1.80	0.13	0.10
CAV	-10.0	1.80	0.11	0.10
CRMS	-10.0	1.80	0.11	0.10

45.2 Response to pulses

Peak and Quasipeak detector

Amplitude relationship

Band A

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 9.05 kHz					
25	Max peak	64.6 dBuV	67.6 dBuV	65.97 dBuV	0.30 dB
25	Quasipeak	58.5 dBuV	61.5 dBuV	59.73 dBuV	0.30 dB
Fin = 75.00 kHz					
25	Max peak	64.6 dBuV	67.6 dBuV	66.02 dBuV	0.30 dB
25	Quasipeak	58.5 dBuV	61.5 dBuV	59.80 dBuV	0.30 dB
Fin = 149.95 kHz					
25	Max peak	64.6 dBuV	67.6 dBuV	66.03 dBuV	0.30 dB
25	Quasipeak	58.5 dBuV	61.5 dBuV	59.81 dBuV	0.30 dB

Band B

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 0.15500 MHz					
100	Max peak	65.1 dBuV	68.1 dBuV	66.40 dBuV	0.30 dB
100	Quasipeak	58.5 dBuV	61.5 dBuV	60.01 dBuV	0.30 dB
Fin = 15.00000MHz					
100	Max peak	65.1 dBuV	68.1 dBuV	66.63 dBuV	0.30 dB
100	Quasipeak	58.5 dBuV	61.5 dBuV	60.15 dBuV	0.30 dB
Fin = 29.99500MHz					
100	Max peak	65.1 dBuV	68.1 dBuV	66.48 dBuV	0.30 dB
100	Quasipeak	58.5 dBuV	61.5 dBuV	60.09 dBuV	0.30 dB

Band C

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 30.03 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.67 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.49 dBuV	0.31 dB
Fin = 165.00 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.87 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.61 dBuV	0.31 dB
Fin = 299.97 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.92 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.67 dBuV	0.31 dB

Band D

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 300.03 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	62.17 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	50.17 dBuV	0.31 dB
Fin = 650.00 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.87 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.78 dBuV	0.31 dB
Fin = 999.97 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	62.06 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	50.06 dBuV	0.31 dB

Band E

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 1000.25 MHz						
50000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.54 dBuV	0.12 dB
Fin = 7999.75 MHz						
50000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.46 dBuV	0.15 dB

Quasipeak, variation with repetition frequency

Band A

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 9.05 kHz					
25	Reference			59.86 dBuV	
100		3.0 dB	5.0 dB	3.90 dB	0.05 dB
60		2.0 dB	4.0 dB	2.73 dB	0.05 dB
10		-5.0 dB	-3.0 dB	-3.89 dB	0.05 dB
5		-9.0 dB	-6.0 dB	-7.76 dB	0.05 dB
2		-15.0 dB	-11.0 dB	-13.58 dB	0.05 dB
1		-19.0 dB	-15.0 dB	-17.10 dB	0.05 dB
single		-21.0 dB	-17.0 dB	-18.93 dB	0.05 dB
Fin = 75.00 kHz					
25	Reference			59.82 dBuV	
100		3.0 dB	5.0 dB	4.00 dB	0.05 dB
60		2.0 dB	4.0 dB	2.73 dB	0.05 dB
10		-5.0 dB	-3.0 dB	-3.82 dB	0.05 dB
5		-9.0 dB	-6.0 dB	-7.76 dB	0.05 dB
2		-15.0 dB	-11.0 dB	-13.58 dB	0.05 dB
1		-19.0 dB	-15.0 dB	-17.36 dB	0.05 dB
single		-21.0 dB	-17.0 dB	-18.98 dB	0.05 dB
Fin = 149.95 kHz					
25	Reference			60.91 dBuV	
100		3.0 dB	5.0 dB	3.78 dB	0.05 dB
60		2.0 dB	4.0 dB	2.60 dB	0.05 dB
10		-5.0 dB	-3.0 dB	-3.98 dB	0.05 dB
5		-9.0 dB	-6.0 dB	-7.86 dB	0.05 dB
2		-15.0 dB	-11.0 dB	-13.74 dB	0.05 dB
1		-19.0 dB	-15.0 dB	-17.47 dB	0.05 dB
single		-21.0 dB	-17.0 dB	-19.13 dB	0.05 dB

Band B

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 0.15500 MHz					
100	Reference			60.66 dBuV	
20		-7.5 dB	-5.5 dB	-7.02 dB	0.05 dB
10		-11.5 dB	-8.5 dB	-11.19 dB	0.05 dB
2		-22.5 dB	-18.5 dB	-21.57 dB	0.05 dB
1		-24.5 dB	-20.5 dB	-22.99 dB	0.05 dB
single		-25.5 dB	-21.5 dB	-22.82 dB	0.05 dB
Fin = 15.00000 MHz					
100	Reference			60.28 dBuV	
20		-7.5 dB	-5.5 dB	-7.03 dB	0.05 dB
10		-11.5 dB	-8.5 dB	-11.24 dB	0.05 dB
2		-22.5 dB	-18.5 dB	-21.74 dB	0.05 dB
1		-24.5 dB	-20.5 dB	-23.11 dB	0.05 dB
single		-25.5 dB	-21.5 dB	-23.24 dB	0.05 dB
Fin = 29.99500 MHz					
100	Reference			60.81 dBuV	
20		-7.5 dB	-5.5 dB	-7.01 dB	0.05 dB
10		-11.5 dB	-8.5 dB	-11.15 dB	0.05 dB
2		-22.5 dB	-18.5 dB	-21.63 dB	0.05 dB
1		-24.5 dB	-20.5 dB	-22.99 dB	0.05 dB
single		-25.5 dB	-21.5 dB	-23.30 dB	0.05 dB

Band C

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 30.03 MHz					
100	Reference			49.89 dBuV	
20		-10.0 dB	-8.0 dB	-9.66 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.66 dB	0.05 dB
2		-28.0 dB	-24.0 dB	-26.99 dB	0.05 dB
1		-30.5 dB	-26.5 dB	-29.95 dB	0.05 dB
single		-33.5 dB	-29.5 dB	-30.38 dB	0.05 dB
Fin = 165.00 MHz					
100	Reference			49.73 dBuV	
20		-10.0 dB	-8.0 dB	-9.66 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.75 dB	0.05 dB
2		-28.0 dB	-24.0 dB	-26.84 dB	0.05 dB
1		-30.5 dB	-26.5 dB	-30.35 dB	0.05 dB
single		-33.5 dB	-29.5 dB	-29.98 dB	0.05 dB
Fin = 299.97 MHz					
100	Reference			49.43 dBuV	
20		-10.0 dB	-8.0 dB	-9.57 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.64 dB	0.05 dB
2		-28.0 dB	-24.0 dB	-26.86 dB	0.05 dB
1		-30.5 dB	-26.5 dB	-30.23 dB	0.05 dB
single		-33.5 dB	-29.5 dB	-30.46 dB	0.05 dB

Band D

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 300.03 MHz					
100	Reference			50.17 dBuV	
20		-10.0 dB	-8.0 dB	-9.64 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.77 dB	0.05 dB
Fin = 650.00 MHz					
100	Reference			50.34 dBuV	
20		-10.0 dB	-8.0 dB	-9.58 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.76 dB	0.05 dB
Fin = 999.97 MHz					
100	Reference			50.24 dBuV	
20		-10.0 dB	-8.0 dB	-9.70 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.78 dB	0.05 dB

Measurement at 1 kHz pulse frequency

Band B

fp/Hz		DLL	DUL	actual	MU
Fin = 0.15500 MHz					
100	Reference			60.44 dBuV	
1000		3.5 dB	5.5 dB	4.47 dB	0.05 dB
Fin = 15.00000 MHz					
100	Reference			60.07 dBuV	
1000		3.5 dB	5.5 dB	4.66 dB	0.05 dB
Fin = 29.99500 MHz					
100	Reference			59.57 dBuV	
1000		3.5 dB	5.5 dB	4.45 dB	0.05 dB

Band C

fp/Hz		DLL	DUL	actual	MU
Fin = 30.03 MHz					
100	Reference			38.53 dBuV	
1000		7.0 dB	9.0 dB	8.60 dB	0.05 dB
Fin = 165.00 MHz					
100	Reference			38.73 dBuV	
1000		7.0 dB	9.0 dB	8.60 dB	0.05 dB
Fin = 299.97 MHz					
100	Reference			39.10 dBuV	
1000		7.0 dB	9.0 dB	8.60 dB	0.05 dB

Band D

fp/Hz		DLL	DUL	actual	MU
Fin = 300.03 MHz					
100	Reference			39.53 dBuV	
1000		7.0 dB	9.0 dB	8.59 dB	0.05 dB
Fin = 650.00 MHz					
100	Reference			39.02 dBuV	
1000		7.0 dB	9.0 dB	8.50 dB	0.05 dB
Fin = 999.97 MHz					
100	Reference			38.07 dBuV	
1000		7.0 dB	9.0 dB	8.44 dB	0.05 dB

CISPR Average Detector

Amplitude relationship

Band A

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 9.05 kHz						
25	200	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	60.30 dBuV	0.12 dB
25	200	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	60.30 dBuV	0.12 dB
Fin = 75.00 kHz						
25	200	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	59.98 dBuV	0.12 dB
25	200	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	59.98 dBuV	0.12 dB
Fin = 149.95 kHz						
25	200	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	59.98 dBuV	0.12 dB
25	200	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	59.98 dBuV	0.12 dB

Band B

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 0.15500 MHz						
500	20	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	60.05 dBuV	0.12 dB
500	20	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	60.05 dBuV	0.12 dB
Fin = 15.00000 MHz						
500	20	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	60.00 dBuV	0.12 dB
500	20	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	60.00 dBuV	0.12 dB
Fin = 29.99500 MHz						
500	20	60.00 CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	60.02 dBuV	0.12 dB
500	20	60.00 CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	60.02 dBuV	0.12 dB

Band C

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 30.03 MHz							
5000	2	60.00	CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	60.00 dBuV	0.12 dB
5000	2	60.00	CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	60.00 dBuV	0.12 dB
Fin = 165.00 MHz							
5000	2	60.00	CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	60.07 dBuV	0.12 dB
5000	2	60.00	CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	60.07 dBuV	0.12 dB
Fin = 299.97 MHz							
5000	2	60.00	CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	59.89 dBuV	0.12 dB
5000	2	60.00	CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	59.89 dBuV	0.12 dB

Band D

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 300.03 MHz							
5000	2	60.00	CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	60.02 dBuV	0.12 dB
5000	2	60.00	CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	60.02 dBuV	0.12 dB
Fin = 650.00 MHz							
5000	2	60.00	CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	59.89 dBuV	0.12 dB
5000	2	60.00	CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	59.89 dBuV	0.12 dB
Fin = 999.97 MHz							
5000	2	60.00	CISPR AV (Ed.4/5)	58.5 dBuV	61.5 dBuV	59.96 dBuV	0.12 dB
5000	2	60.00	CISPR AV (Ed.3.2)	59.5 dBuV	62.5 dBuV	59.96 dBuV	0.12 dB

Band E

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 1000.25 MHz							
50000	0.2	60.00		58.5 dBuV	61.5 dBuV	60.13 dBuV	0.12 dB
Fin = 7999.75 MHz							
50000	0.2	60.00		58.5 dBuV	61.5 dBuV	60.04 dBuV	0.15 dB

CISPR-average, variation with repetition frequency

Band A

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 9.05 kHz							
70	200	Reference				68.54 dBuV	
35	200	62.54	-6.0 dB	-1.0 dB	2.0 dB	0.11 dB	0.05 dB
17.5	200	56.54	-12.0 dB	-1.0 dB	2.0 dB	0.35 dB	0.05 dB

Fin = 75.00 kHz

70	200	Reference					68.70	dBuV	
35	200	62.70	-6.0	dB	-1.0	dB	2.0	dB	0.00 dB	0.05 dB
17.5	200	56.70	-12.0	dB	-1.0	dB	2.0	dB	0.04 dB	0.05 dB

Fin = 149.95 kHz

70	200	Reference					68.73	dBuV	
35	200	62.73	-6.0	dB	-1.0	dB	2.0	dB	-0.01 dB	0.05 dB
17.5	200	56.73	-12.0	dB	-1.0	dB	2.0	dB	0.01 dB	0.05 dB

Band B

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU

Fin = 0.15500 MHz

3180	20	Reference					76.01	dBuV	
1590	20	70.01	-6.0	dB	-1.0	dB	2.0	dB	-0.02 dB	0.05 dB
795	20	64.01	-12.0	dB	-1.0	dB	2.0	dB	-0.03 dB	0.05 dB
398	20	58.01	-18.0	dB	-1.0	dB	2.0	dB	-0.02 dB	0.05 dB

Fin = 15.00000 MHz

3180	20	Reference					75.98	dBuV	
1590	20	69.98	-6.0	dB	-1.0	dB	2.0	dB	-0.02 dB	0.05 dB
795	20	63.98	-12.0	dB	-1.0	dB	2.0	dB	-0.04 dB	0.05 dB
398	20	57.98	-18.0	dB	-1.0	dB	2.0	dB	-0.04 dB	0.05 dB

Fin = 29.99500 MHz

3180	20	Reference					76.02	dBuV	
1590	20	70.02	-6.0	dB	-1.0	dB	2.0	dB	-0.02 dB	0.05 dB
795	20	64.02	-12.0	dB	-1.0	dB	2.0	dB	-0.04 dB	0.05 dB
398	20	58.02	-18.0	dB	-1.0	dB	2.0	dB	-0.04 dB	0.05 dB

Band C

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU

Fin = 30.03 MHz

42400	2	Reference					78.37	dBuV	
21200	2	72.37	-6.0	dB	-1.0	dB	2.0	dB	-0.02 dB	0.05 dB
10600	2	66.37	-12.0	dB	-1.0	dB	2.0	dB	-0.04 dB	0.05 dB
5300	2	60.37	-18.0	dB	-1.0	dB	2.0	dB	-0.06 dB	0.05 dB
2650	2	54.37	-24.0	dB	-1.0	dB	2.0	dB	-0.05 dB	0.05 dB

Fin = 165.00 MHz

42400	2	Reference					78.57	dBuV	
21200	2	72.57	-6.0	dB	-1.0	dB	2.0	dB	-0.02 dB	0.05 dB
10600	2	66.57	-12.0	dB	-1.0	dB	2.0	dB	-0.05 dB	0.05 dB
5300	2	60.57	-18.0	dB	-1.0	dB	2.0	dB	-0.07 dB	0.05 dB
2650	2	54.57	-24.0	dB	-1.0	dB	2.0	dB	-0.07 dB	0.05 dB

Fin = 299.97 MHz

42400	2	Reference					78.59	dBuV	
21200	2	72.59	-6.0	dB	-1.0	dB	2.0	dB	-0.03 dB	0.05 dB
10600	2	66.59	-12.0	dB	-1.0	dB	2.0	dB	-0.06 dB	0.05 dB
5300	2	60.59	-18.0	dB	-1.0	dB	2.0	dB	-0.08 dB	0.05 dB
2650	2	54.59	-24.0	dB	-1.0	dB	2.0	dB	-0.09 dB	0.05 dB

Band D

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 300.03 MHz							
42400	2	Reference				78.79 dBuV	
21200	2	72.79	-6.0 dB	-1.0 dB	2.0 dB	-0.02 dB	0.05 dB
10600	2	66.79	-12.0 dB	-1.0 dB	2.0 dB	-0.05 dB	0.05 dB
5300	2	60.79	-18.0 dB	-1.0 dB	2.0 dB	-0.07 dB	0.05 dB
2650	2	54.79	-24.0 dB	-1.0 dB	2.0 dB	-0.08 dB	0.05 dB
Fin = 650.00 MHz							
42400	2	Reference				78.52 dBuV	
21200	2	72.52	-6.0 dB	-1.0 dB	2.0 dB	-0.02 dB	0.05 dB
10600	2	66.52	-12.0 dB	-1.0 dB	2.0 dB	-0.04 dB	0.05 dB
5300	2	60.52	-18.0 dB	-1.0 dB	2.0 dB	-0.06 dB	0.05 dB
2650	2	54.52	-24.0 dB	-1.0 dB	2.0 dB	-0.06 dB	0.05 dB
Fin = 999.97 MHz							
42400	2	Reference				78.67 dBuV	
21200	2	72.67	-6.0 dB	-1.0 dB	2.0 dB	-0.02 dB	0.05 dB
10600	2	66.67	-12.0 dB	-1.0 dB	2.0 dB	-0.04 dB	0.05 dB
5300	2	60.67	-18.0 dB	-1.0 dB	2.0 dB	-0.05 dB	0.05 dB
2650	2	54.67	-24.0 dB	-1.0 dB	2.0 dB	-0.06 dB	0.05 dB

Band E

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 1000.25 MHz							
353500	0.2	Reference				77.09 dBuV	
176750	0.2	71.09	-6.0 dB	-1.0 dB	2.0 dB	-0.02 dB	0.05 dB
17675	0.2	51.09	-26.0 dB	-1.0 dB	2.0 dB	+0.25 dB	0.05 dB
Fin = 7999.75 MHz							
353500	0.2	Reference				77.04 dBuV	
176750	0.2	71.04	-6.0 dB	-1.0 dB	2.0 dB	-0.01 dB	0.05 dB
17675	0.2	51.04	-26.0 dB	-1.0 dB	2.0 dB	+0.29 dB	0.05 dB

Note: The limits of -1,0 dB/+2,0 dB are used to comply with both CISPR 16-1-1:2014 (Ed.3.2) / CISPR 16-1-1:2015 (Ed.4) and CISPR 16-1-1:2019 (Ed.5) as the common tolerance of both requirements.

Response to intermittent disturbance

fp /Hz	width /ms	weighting /dB	DLL /dB	DUL /dB	actual /dB	MU /dB
Band A						
Fin = 9.05 kHz						
0.625	160	-9.0	-1.00	1.00	0.04	0.05
Fin = 75.00 kHz						
0.625	160	-9.0	-1.00	1.00	0.04	0.05
Fin = 149.95 kHz						
0.625	160	-9.0	-1.00	1.00	0.04	0.05

Band B

Fin = 0.15500 MHz
0.625 160 -9.0 -1.00 1.00 0.04 0.05

Fin = 15.00000 MHz
0.625 160 -9.0 -1.00 1.00 0.04 0.05

Fin = 29.99500 MHz
0.625 160 -9.0 -1.00 1.00 0.05 0.05

Band C

Fin = 30.03 MHz
0.625 100 -9.0 -1.00 1.00 0.06 0.05

Fin = 165.00 MHz
0.625 100 -9.0 -1.00 1.00 0.06 0.05

Fin = 299.97 MHz
0.625 100 -9.0 -1.00 1.00 0.05 0.05

Band D

Fin = 300.03 MHz
0.625 100 -9.0 -1.00 1.00 0.07 0.05

Fin = 650.00 MHz
0.625 100 -9.0 -1.00 1.00 0.07 0.05

Fin = 999.97 MHz
0.625 100 -9.0 -1.00 1.00 0.07 0.05

Band E

Fin = 1000.25 MHz
0.625 100 -9.0 -1.00 1.00 0.06 0.05

Fin = 7999.75 MHz
0.625 100 -9.0 -1.00 1.00 0.06 0.05

RMS-Average Detector

Amplitude relationship

Band A

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 9.05 kHz						
25	200	60.00	58.5 dBuV	61.5 dBuV	59.98 dBuV	0.10 dB
Fin = 75.00 kHz						
25	200	60.00	58.5 dBuV	61.5 dBuV	59.88 dBuV	0.10 dB
Fin = 149.95 kHz						
25	200	60.00	58.5 dBuV	61.5 dBuV	59.89 dBuV	0.10 dB

Band B

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 0.15500 MHz						
1000	20	60.00	58.5 dBuV	61.5 dBuV	59.86 dBuV	0.10 dB
Fin = 15.00000 MHz						
1000	20	60.00	58.5 dBuV	61.5 dBuV	59.92 dBuV	0.10 dB
Fin = 29.99500 MHz						
1000	20	60.00	58.5 dBuV	61.5 dBuV	59.96 dBuV	0.10 dB

Band C

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 30.03 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.88 dBuV	0.10 dB
Fin = 165.00 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.93 dBuV	0.10 dB
Fin = 299.97 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.74 dBuV	0.10 dB

Band D

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 300.03 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.89 dBuV	0.10 dB
Fin = 650.00 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.72 dBuV	0.10 dB
Fin = 999.97 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.77 dBuV	0.10 dB

Band E

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 1000.25 MHz						
1000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.26 dBuV	0.12 dB
Fin = 7999.75 MHz						
1000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.36 dBuV	0.15 dB

Variation with repetition frequency

Band A

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 9.05 kHz							
25	200	Reference				59.63 dBuV	
100	200	65.63	6.0 dB	-0.6 dB	0.6 dB	0.02 dB	0.05 dB
10	200	55.63	-4.0 dB	-0.4 dB	0.4 dB	0.05 dB	0.05 dB
5	200	50.63	-9.0 dB	-0.7 dB	0.7 dB	-0.17 dB	0.05 dB
Fin = 75.00 kHz							
25	200	Reference				59.72 dBuV	
100	200	65.72	6.0 dB	-0.6 dB	0.6 dB	0.07 dB	0.05 dB
10	200	55.72	-4.0 dB	-0.4 dB	0.4 dB	0.06 dB	0.05 dB
5	200	50.72	-9.0 dB	-0.7 dB	0.7 dB	-0.35 dB	0.05 dB
Fin = 149.95 kHz							
25	200	Reference				59.73 dBuV	
100	200	65.73	6.0 dB	-0.6 dB	0.6 dB	0.06 dB	0.05 dB
10	200	55.73	-4.0 dB	-0.4 dB	0.4 dB	0.05 dB	0.05 dB
5	200	50.73	-9.0 dB	-0.7 dB	0.7 dB	-0.45 dB	0.05 dB

Band B

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 0.15500 MHz							
1000	20	Reference				59.75 dBuV	
316	20	54.75	-5.0 dB	-0.5 dB	0.5 dB	-0.24 dB	0.05 dB
100	20	49.75	-10.0 dB	-1.0 dB	1.0 dB	-0.01 dB	0.05 dB
32	20	44.75	-15.0 dB	-1.5 dB	1.5 dB	-0.24 dB	0.05 dB
25	20	43.75	-16.0 dB	-1.6 dB	1.6 dB	-0.09 dB	0.05 dB
10	20	39.75	-20.0 dB	-2.0 dB	2.0 dB	-0.02 dB	0.05 dB
5	20	34.75	-25.0 dB	-2.3 dB	2.3 dB	-0.60 dB	0.05 dB
Fin = 15.00000 MHz							
1000	20	Reference				59.83 dBuV	
316	20	54.83	-5.0 dB	-0.5 dB	0.5 dB	-0.01 dB	0.05 dB
100	20	49.83	-10.0 dB	-1.0 dB	1.0 dB	-0.01 dB	0.05 dB
32	20	44.83	-15.0 dB	-1.5 dB	1.5 dB	0.02 dB	0.05 dB
25	20	43.83	-16.0 dB	-1.6 dB	1.6 dB	-0.09 dB	0.05 dB
10	20	39.83	-20.0 dB	-2.0 dB	2.0 dB	-0.04 dB	0.05 dB
5	20	34.83	-25.0 dB	-2.3 dB	2.3 dB	-0.61 dB	0.05 dB
Fin = 29.99500 MHz							
1000	20	Reference				59.90 dBuV	
316	20	54.90	-5.0 dB	-0.5 dB	0.5 dB	-0.01 dB	0.05 dB
100	20	49.90	-10.0 dB	-1.0 dB	1.0 dB	-0.01 dB	0.05 dB
32	20	44.90	-15.0 dB	-1.5 dB	1.5 dB	0.01 dB	0.05 dB
25	20	43.90	-16.0 dB	-1.6 dB	1.6 dB	-0.09 dB	0.05 dB
10	20	39.90	-20.0 dB	-2.0 dB	2.0 dB	-0.04 dB	0.05 dB
5	20	34.90	-25.0 dB	-2.3 dB	2.3 dB	-0.61 dB	0.05 dB

Band C

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 30.03 MHz							
1000	2	Reference				59.69 dBuV	
10000	2	69.69	+10.0 dB	-1.0 dB	1.0 dB	0.01 dB	0.05 dB
316	2	54.69	-5.0 dB	-0.5 dB	0.5 dB	-0.04 dB	0.05 dB
100	2	49.69	-10.0 dB	-1.0 dB	1.0 dB	-0.04 dB	0.05 dB
32	2	39.69	-20.0 dB	-2.0 dB	2.0 dB	0.21 dB	0.05 dB
Fin = 165.00 MHz							
1000	2	Reference				59.87 dBuV	
10000	2	69.87	+10.0 dB	-1.0 dB	1.0 dB	0.02 dB	0.05 dB
316	2	54.87	-5.0 dB	-0.5 dB	0.5 dB	-0.03 dB	0.05 dB
100	2	49.87	-10.0 dB	-1.0 dB	1.0 dB	-0.03 dB	0.05 dB
32	2	39.87	-20.0 dB	-2.0 dB	2.0 dB	0.21 dB	0.05 dB
Fin = 299.97 MHz							
1000	2	Reference				59.89 dBuV	
10000	2	69.89	+10.0 dB	-1.0 dB	1.0 dB	0.02 dB	0.05 dB
316	2	54.89	-5.0 dB	-0.5 dB	0.5 dB	-0.03 dB	0.05 dB
100	2	49.89	-10.0 dB	-1.0 dB	1.0 dB	-0.04 dB	0.05 dB
32	2	39.89	-20.0 dB	-2.0 dB	2.0 dB	0.19 dB	0.05 dB

Band D

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 300.03 MHz							
1000	2	Reference				60.10 dBuV	
10000	2	70.10	+10.0 dB	-1.0 dB	1.0 dB	0.02 dB	0.05 dB
316	2	55.10	-5.0 dB	-0.5 dB	0.5 dB	-0.03 dB	0.05 dB
100	2	50.10	-10.0 dB	-1.0 dB	1.0 dB	-0.03 dB	0.05 dB
32	2	40.10	-20.0 dB	-2.0 dB	2.0 dB	0.20 dB	0.05 dB
Fin = 650.00 MHz							
1000	2	Reference				59.79 dBuV	
10000	2	69.79	+10.0 dB	-1.0 dB	1.0 dB	0.03 dB	0.05 dB
316	2	54.79	-5.0 dB	-0.5 dB	0.5 dB	-0.02 dB	0.05 dB
100	2	49.79	-10.0 dB	-1.0 dB	1.0 dB	-0.03 dB	0.05 dB
32	2	39.79	-20.0 dB	-2.0 dB	2.0 dB	0.21 dB	0.05 dB
Fin = 999.97 MHz							
1000	2	Reference				59.93 dBuV	
10000	2	69.93	+10.0 dB	-1.0 dB	1.0 dB	0.03 dB	0.05 dB
316	2	54.93	-5.0 dB	-0.5 dB	0.5 dB	-0.02 dB	0.05 dB
100	2	49.93	-10.0 dB	-1.0 dB	1.0 dB	-0.01 dB	0.05 dB
32	2	39.93	-20.0 dB	-2.0 dB	2.0 dB	0.21 dB	0.05 dB

Band E

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 1000.25 MHz							
1000	0.2	Reference				60.36 dBuV	
100000	0.2	80.36	+20.0 dB	-2.0 dB	2.0 dB	0.01 dB	0.05 dB
10000	0.2	70.36	+10.0 dB	-1.0 dB	1.0 dB	0.00 dB	0.05 dB
316	0.2	50.36	-10.0 dB	-1.0 dB	1.0 dB	0.26 dB	0.05 dB
Fin = 7999.75 MHz							
1000	0.2	Reference				60.42 dBuV	
100000	0.2	80.42	+20.0 dB	-2.0 dB	2.0 dB	0.00 dB	0.05 dB
10000	0.2	70.42	+10.0 dB	-1.0 dB	1.0 dB	-0.01 dB	0.05 dB
316	0.2	50.42	-10.0 dB	-1.0 dB	1.0 dB	0.26 dB	0.05 dB

Response to intermittent disturbance

fp /Hz	width /ms	weighting /dB	DLL /dB	DUL /dB	actual /dB	MU /dB
Band A						
Fin = 9.05 kHz						
0.625	160	-7.9	-1.00	1.00	-0.14	0.05
Fin = 75.00 kHz						
0.625	160	-7.9	-1.00	1.00	-0.14	0.05
Fin = 149.95 kHz						
0.625	160	-7.9	-1.00	1.00	-0.14	0.05

Band B

Fin = 0.15500 MHz
0.625 160 -7.9 -1.00 1.00 -0.19 0.05

Fin = 15.00000 MHz
0.625 160 -7.9 -1.00 1.00 -0.19 0.05

Fin = 29.99500 MHz
0.625 160 -7.9 -1.00 1.00 -0.18 0.05

Band C

Fin = 30.03 MHz
0.625 100 -9.0 -1.00 1.00 -0.20 0.05

Fin = 165.00 MHz
0.625 100 -9.0 -1.00 1.00 -0.20 0.05

Fin = 299.97 MHz
0.625 100 -9.0 -1.00 1.00 -0.20 0.05

Band D

Fin = 300.03 MHz
0.625 100 -9.0 -1.00 1.00 -0.20 0.05

Fin = 650.00 MHz
0.625 100 -9.0 -1.00 1.00 -0.19 0.05

Fin = 999.97 MHz
0.625 100 -9.0 -1.00 1.00 -0.19 0.05

Band E

Fin = 1000.25 MHz
0.625 100 -9.0 -1.00 1.00 0.03 0.05

Fin = 7999.75 MHz
0.625 100 -9.0 -1.00 1.00 0.03 0.05

45.3 Updating service information on the instrument

PASS

Incoming Results

Designation:	**EMI Test Receiver**
Type:	**ESW-8**
Material No.:	**1328.4100K08**
Serial No.:	**101344**
Certificate No.:	**0001A300773182**
Referring to Test Documentation:	**1328.4100.01-PB-01.29** **1328.3749.00-PB-06.00** **1338.2322.00-PB-03.06**

State	Pages
FAIL	56, 71
UGB	31

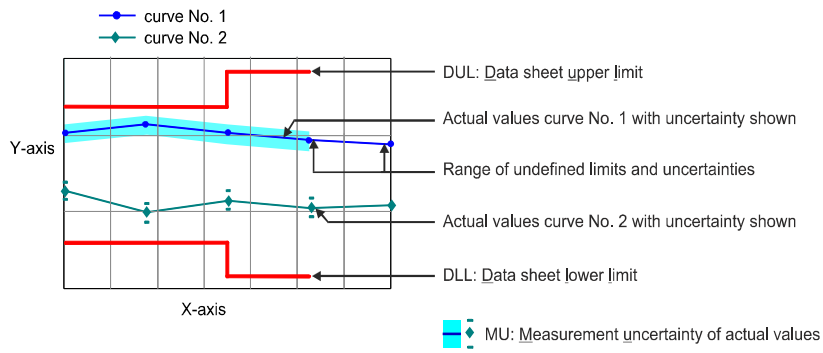
Test Department:	**3MES2**
Name:	**See certificate**
Date:	**2024-11-28**

Incoming Results

The following abbreviations may be used in this document

{a}	No measurement uncertainty stated because the errors always add together. So it is sure that a measurement result evaluated as "PASS" is pass.
{b}	The measurement uncertainty depends on the measurement result. The stated measurement uncertainty is valid for the close area around the specification. Measurement results outside the close area have a higher measurement uncertainty but are within the specification.
{c}	Functional test, therefore no measurement uncertainty is stated.
{d}	Typical value, refer to performance test.
{e}	The measurement uncertainty is taken into account when setting the measuring system.
{g}	Verification of specified requirements, non-accredited measurements. Technical operations that consist of the determination of one or more characteristics to a specified procedure (formerly {f}).
DL or DT	Data Limit for symmetrical tolerance limits
DLL	Datasheet Lower Limit
DUL	Datasheet Upper Limit
MU	Symmetrical Measurement Uncertainty
MLL or MLV	Measurement Uncertainty Lower Value
MUL or MUV	Measurement Uncertainty Upper Value
Nom.	Nominal Value
Dev.	Deviation
Act.	Actual Value
UGB	Uncertainty Guard Band: Measuring uncertainty violates the data (spec.) limit.
UGB1	A compliance statement may be possible where a confidence level of less than 95 % is acceptable.
UGB2	A non-compliance statement may be possible where a confidence level of less than 95 % is acceptable.
DU	Datasheet Uncertainty

Explanation of charts



Incoming Results

Table of contents

Incoming Results

Software used for measurement

Item	Type	Version	Remark
7010.2181.00_ESW.G5Lim	Limit File	2023-03-02 10:22	
Suite	Setup	V12.37.04	Test Management Software G5
Suite	Setup	V12.49.03	Test Management Software G5
Test Program (7010.2181.00)	Component	V01.15.11	

1. General function tests

Selftest successful	pass	pass
Self Alignment successful	pass	pass

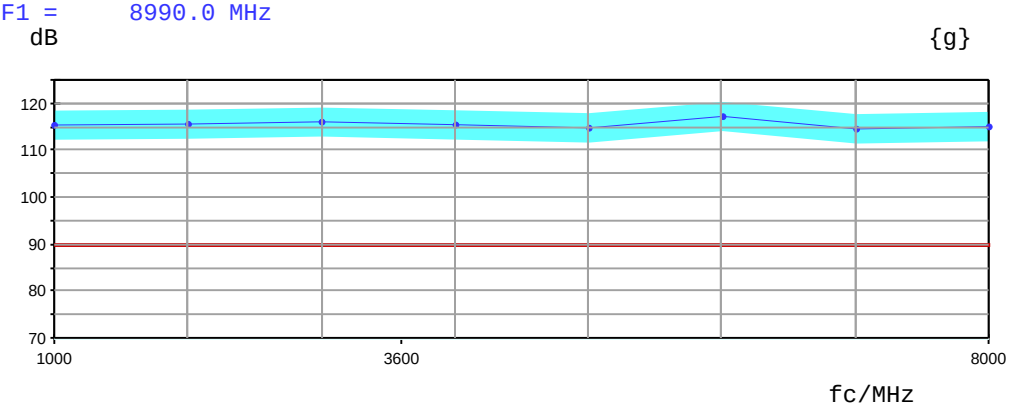
2. Checking the reference frequency uncertainty

	DUL	DLL	Actual	MU
Error of internal 10 MHz	1.00 Hz..	-1.00 Hz	+0.0500 Hz	0.0120 Hz

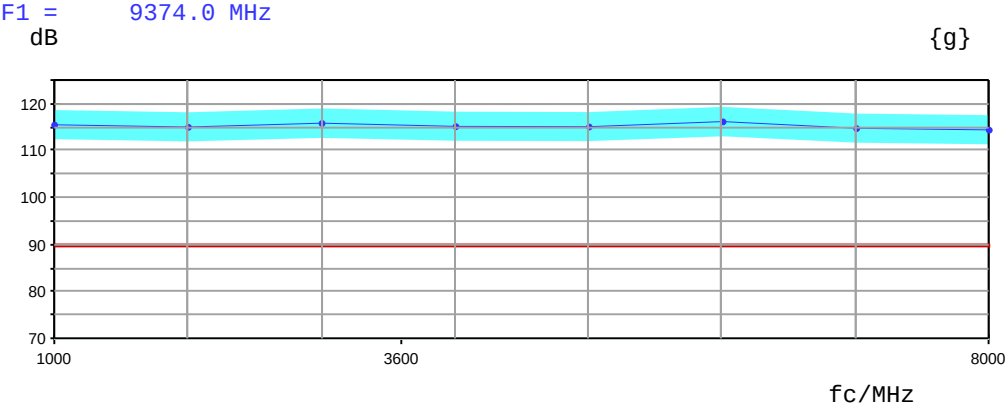
3. Immunity to interference

3.1 1st IF Image Frequency Rejection

IF1 = 8990.0 MHz



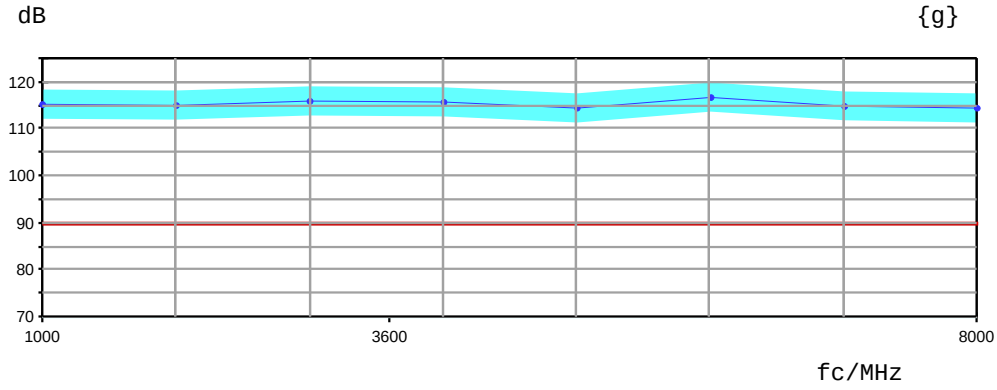
IF1 = 9374.0 MHz



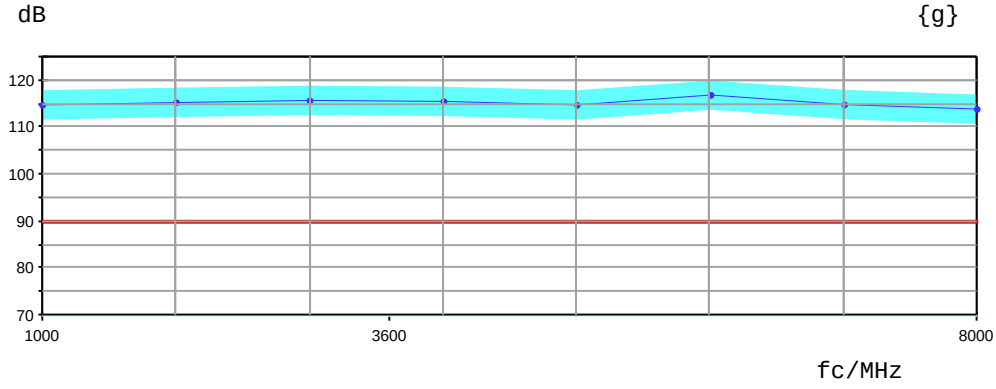
3.2 1st IF Rejection

IF1 = 8990.0 MHz

Incoming Results



IF1 = 9374.0 MHz



3.3 2nd IF Image Frequency Rejection

IF2 = 1317.0 MHz

fc	DLL	Actual	MU {g}
1000.0 MHz	90 dB	112.0 dB	3.1 dB

3.4 3rd IF Image Frequency Rejection

IF3 = 37.0 MHz

fc	DLL	Actual	MU {g}
63.0 MHz	90 dB	113.1 dB	3.1 dB
100.0 MHz	90 dB	113.2 dB	3.1 dB
900.0 MHz	90 dB	112.4 dB	3.1 dB
1100.0 MHz	90 dB	114.9 dB	3.1 dB
7990.0 MHz	90 dB	114.0 dB	3.1 dB

3.5 2nd IF Rejection

IF2 = 1317.0 MHz

fc	DLL	Actual	MU {g}
50.0 MHz	90 dB	113.7 dB	3.1 dB
200.0 MHz	90 dB	113.4 dB	3.1 dB
500.0 MHz	90 dB	112.5 dB	3.1 dB
900.0 MHz	90 dB	112.8 dB	3.1 dB
1100.0 MHz	90 dB	115.6 dB	3.1 dB
7990.0 MHz	90 dB	113.6 dB	3.1 dB

3.6 3rd IF Rejection

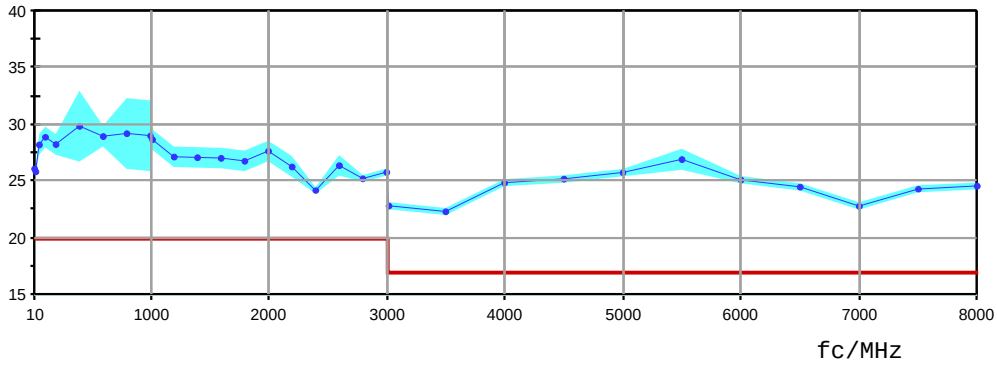
IF3 = 37.0 MHz

Incoming Results

fc	DLL	Actual	MU {g}
100.0 MHz	90 dB	113.3 dB	3.1 dB
200.0 MHz	90 dB	114.6 dB	3.1 dB
500.0 MHz	90 dB	112.7 dB	3.1 dB
900.0 MHz	90 dB	111.8 dB	3.1 dB
1100.0 MHz	90 dB	115.6 dB	3.1 dB
7990.0 MHz	90 dB	114.8 dB	3.1 dB

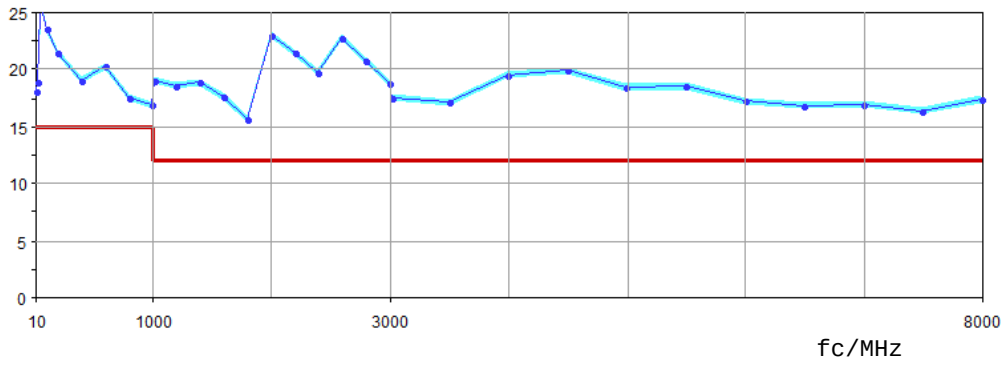
4. Third-order intercept point (TOI)

T.O.I/dBm {g}



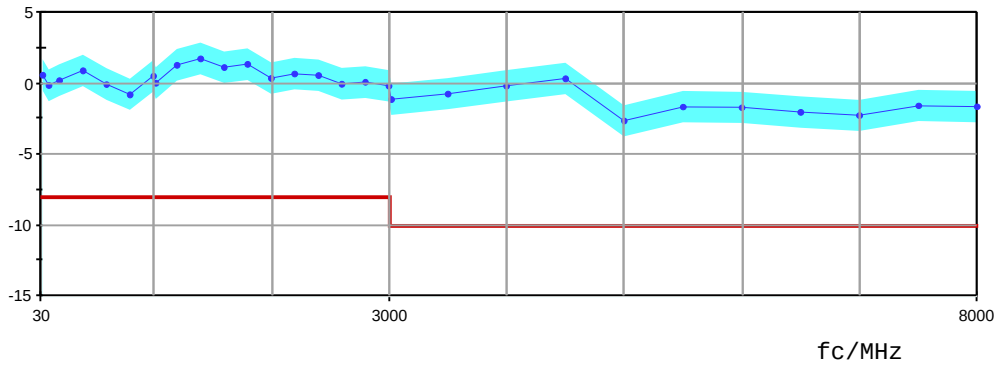
5. Third-order intercept point (TOI) with preselector

T.O.I/dBm {g}



6. Third-order intercept point (TOI) with preselector and preamplifier

T.O.I/dBm {g}



Incoming Results

7. Second harmonic intercept (SHI)

fin	DLL	Actual	MU {g}
9.0 MHz	50.0 dBm	94.6 dBm	1.5 dB
21.0 MHz	50.0 dBm	71.2 dBm	0.6 dB
106.0 MHz	50.0 dBm	64.1 dBm	0.6 dB
274.0 MHz	50.0 dBm	62.1 dBm	0.6 dB
449.9 MHz	70.0 dBm	84.5 dBm	1.5 dB
699.9 MHz	47.0 dBm	79.3 dBm	0.6 dB
999.9 MHz	47.0 dBm	75.2 dBm	0.6 dB
1499.9 MHz	47.0 dBm	98.4 dBm	1.5 dB
1749.9 MHz	62.0 dBm	94.5 dBm	1.5 dB
2699.9 MHz	62.0 dBm	80.9 dBm	1.5 dB
3449.9 MHz	62.0 dBm	80.5 dBm	1.5 dB

8. IF Filters

8.1 Bandwidth switching level uncertainty

RBW (3dB)
reference is 10.0 kHz RBW

Bandwidth	DL	Actual	MU
10.0 MHz	0.1 dB	0.01 dB	0.01 dB
1.0 MHz	0.1 dB	0.00 dB	0.01 dB
100 kHz	0.1 dB	0.00 dB	0.01 dB
10 kHz	0.1 dB	0.00 dB	0.01 dB
1 kHz	0.1 dB	0.00 dB	0.01 dB
100 Hz	0.1 dB	-0.02 dB	0.01 dB

8.2 Bandwidth uncertainty

10.0 MHz	+3 % .. -3 %	-1.10 %	0.36 %
1.0 MHz	+3 % .. -3 %	0.70 %	0.36 %
100 kHz	+3 % .. -3 %	0.70 %	0.36 %
10 kHz	+3 % .. -3 %	0.70 %	0.36 %
1 kHz	+3 % .. -3 %	0.70 %	0.36 %
100 Hz	+3 % .. -3 %	0.70 %	0.36 %

8.3 Shape factor 60 dB : 3 dB

		DUL	Actual	MU
10.0 MHz	shapefactor	5	4.24	0.36 %
1.0 MHz	shapefactor	5	3.97	0.36 %
100 kHz	shapefactor	5	3.96	0.36 %
10 kHz	shapefactor	5	3.98	0.36 %
1 kHz	shapefactor	5	3.96	0.36 %
100 Hz	shapefactor	5	3.98	0.36 %

9. IF Filters (EMI filters)

9.1 Bandwidth switching level uncertainty

RBW (6dB)
reference is 10.0 kHz RBW (normal, 3dB)

Bandwidth	DL	Actual	MU
1 MHz	0.1 dB	0.00 dB	0.01 dB
120 kHz	0.1 dB	0.00 dB	0.01 dB
100 kHz	0.1 dB	0.00 dB	0.01 dB
10 kHz	0.1 dB	0.00 dB	0.01 dB
9 kHz	0.1 dB	0.01 dB	0.01 dB
1 kHz	0.1 dB	0.01 dB	0.01 dB
200 Hz	0.1 dB	0.01 dB	0.01 dB
100 Hz	0.1 dB	-0.01 dB	0.01 dB
10 Hz	0.1 dB	-0.02 dB	0.01 dB

9.2 Bandwidth uncertainty

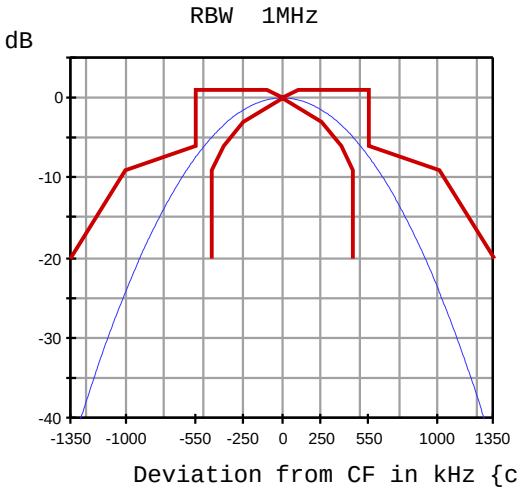
1 MHz	+3 % .. -3 %	-0.5 %	0.92 %
120 kHz	+3 % .. -3 %	-0.5 %	0.92 %
100 kHz	+3 % .. -3 %	-0.5 %	0.20 %
10 kHz	+3 % .. -3 %	-0.5 %	0.20 %
9 kHz	+3 % .. -3 %	-0.5 %	0.18 %
1 kHz	+3 % .. -3 %	-0.5 %	0.17 %
200 Hz	+3 % .. -3 %	-0.2 %	0.20 %
100 Hz	+3 % .. -3 %	-0.8 %	0.18 %
10 Hz	+3 % .. -3 %	0.1 %	0.17 %

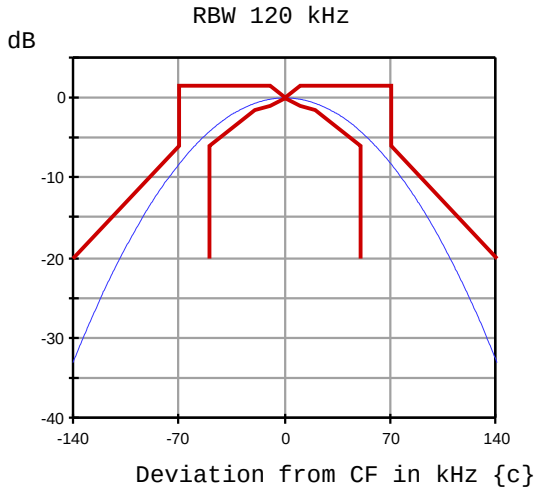
9.3 Shape factor 60 dB : 6 dB

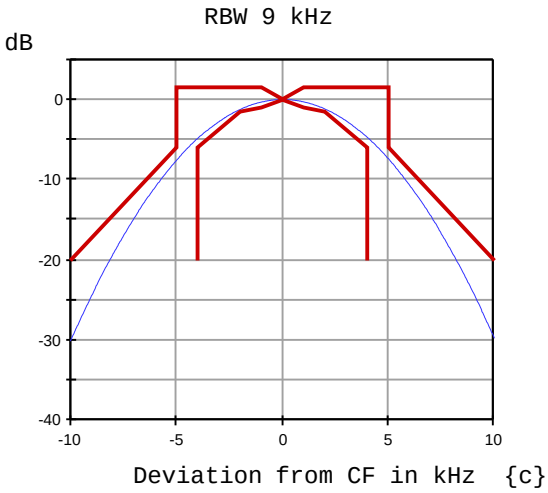
		DUL	Actual	MU
1000 kHz	shapefactor	4	2.8	0.93 %
120 kHz	shapefactor	4	2.8	0.93 %
100 kHz	shapefactor	4	2.8	0.20 %
10 kHz	shapefactor	4	2.8	0.20 %
9 kHz	shapefactor	4	2.8	0.18 %
1 kHz	shapefactor	4	2.8	0.17 %
200 Hz	shapefactor	4	2.8	0.20 %
100 Hz	shapefactor	4	2.8	0.18 %
10 Hz	shapefactor	4	2.8	0.17 %

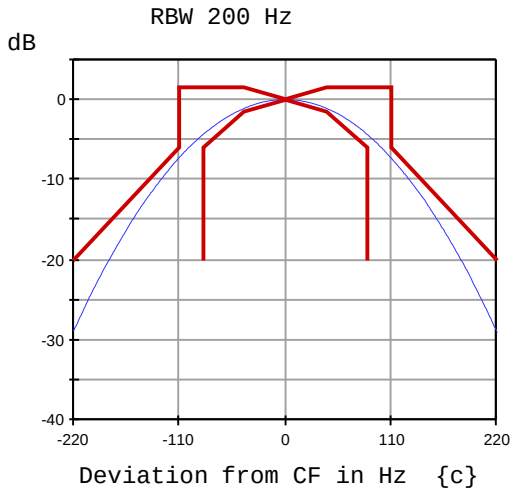
9.4 Overall selectivity

DUT setting: Center Frequency nominal = 64 MHz

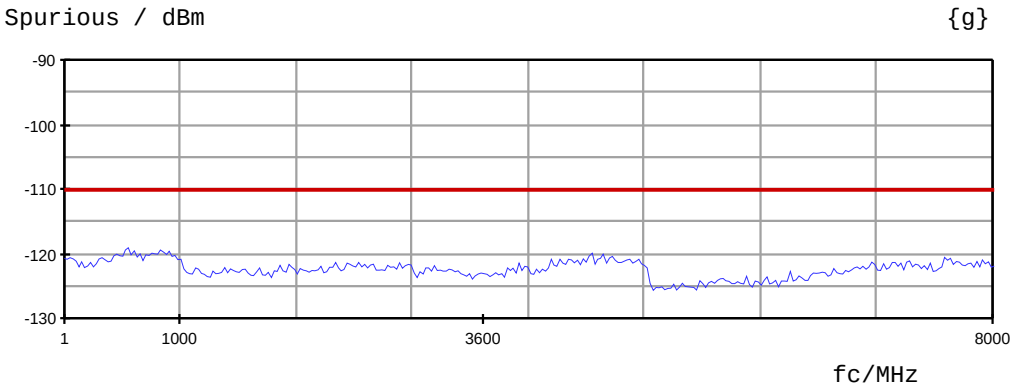








10. Spurious response 1 MHz.. 8.0 GHz



Spurious response 1 MHz.. 1.0 GHz, Input 2, Limiter OFF PASS

Spurious response 1 MHz.. 1.0 GHz, Input 2, Limiter ON PASS

11. Checking Noise Correction

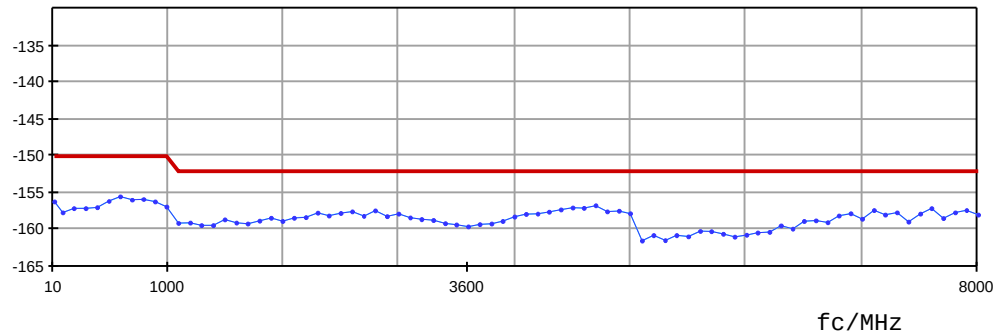
Receiver noise indication function test PASS

12. Noise Display (DANL)

fc		DUL	Actual	MU {g}
2 Hz	(1 Hz BW)	-100 dBm	-116.53 dBm	0.01 dB
10 Hz	(1 Hz BW)	-110 dBm	-122.92 dBm	0.01 dB
30 Hz	(1 Hz BW)	-110 dBm	-127.24 dBm	0.01 dB
90 Hz	(1 Hz BW)	-110 dBm	-133.52 dBm	0.01 dB
300 Hz	(1 Hz BW)	-120 dBm	-137.48 dBm	0.01 dB
980 Hz	(1 Hz BW)	-120 dBm	-141.27 dBm	0.01 dB

fc		DUL	Actual	MU {g}
9.8 kHz	(1 Hz BW)	-145 dBm	-148.18 dBm	0.01 dB
98 kHz	(1 Hz BW)	-145 dBm	-153.43 dBm	0.01 dB
998 kHz	(1 Hz BW)	-145 dBm	-155.76 dBm	0.01 dB
9800 kHz	(1 Hz BW)	-150 dBm	-157.11 dBm	0.01 dB

DANL / dBm normalized to 1 Hz RBW {g}

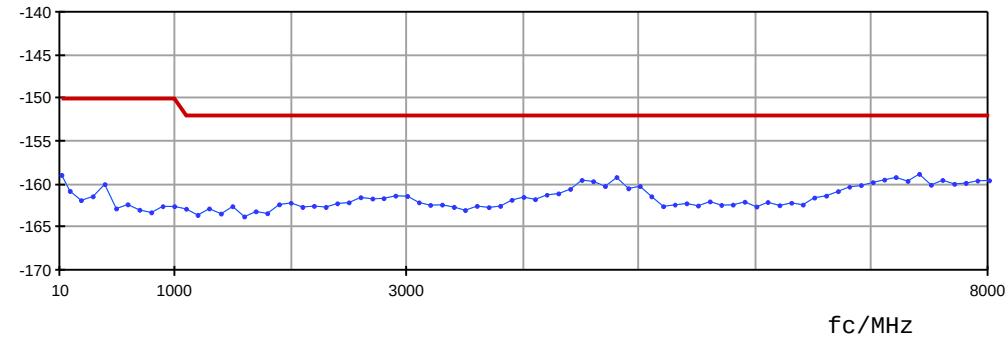


13. Noise Display (DANL) with preselector on

fc		DUL	Actual	MU {g}
2 Hz	(1 Hz BW)	-100 dBm	-119.86 dBm	0.01 dB
10 Hz	(1 Hz BW)	-110 dBm	-126.55 dBm	0.01 dB
30 Hz	(1 Hz BW)	-110 dBm	-138.02 dBm	0.01 dB
90 Hz	(1 Hz BW)	-110 dBm	-142.74 dBm	0.01 dB
300 Hz	(1 Hz BW)	-120 dBm	-146.13 dBm	0.01 dB
980 Hz	(1 Hz BW)	-120 dBm	-149.70 dBm	0.01 dB

fc		DUL	Actual	MU {g}
9.8 kHz	(1 Hz BW)	-145 dBm	-156.76 dBm	0.01 dB
98 kHz	(1 Hz BW)	-145 dBm	-161.19 dBm	0.01 dB
998 kHz	(1 Hz BW)	-145 dBm	-160.81 dBm	0.01 dB
9800 kHz	(1 Hz BW)	-150 dBm	-159.36 dBm	0.01 dB

DANL / dBm normalized to 1 Hz RBW {g}

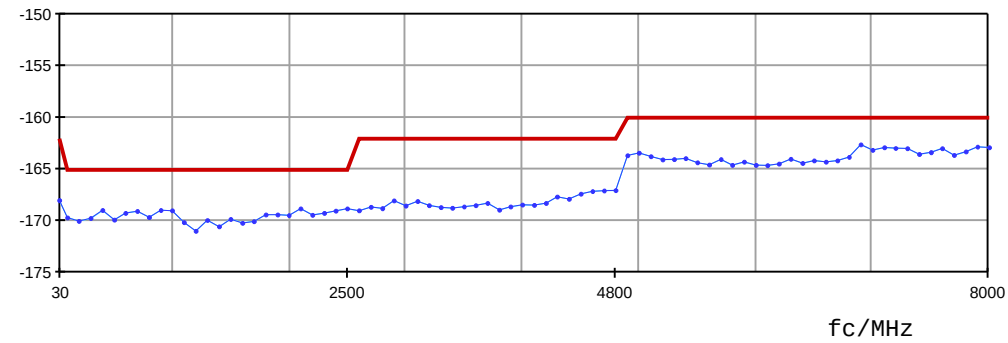


14. Noise Display (DANL) with preselector on and preamplifier on

fc		DUL	Actual	MU {g}
1020 Hz	(1 Hz BW)	-140 dBm	-161.26 dBm	0.01 dB

fc		DUL	Actual	MU {g}
9.8 kHz	(1 Hz BW)	-155 dBm	-167.99 dBm	0.01 dB
98 kHz	(1 Hz BW)	-155 dBm	-167.42 dBm	0.01 dB
998 kHz	(1 Hz BW)	-155 dBm	-165.55 dBm	0.01 dB
9800 kHz	(1 Hz BW)	-162 dBm	-163.78 dBm	0.01 dB

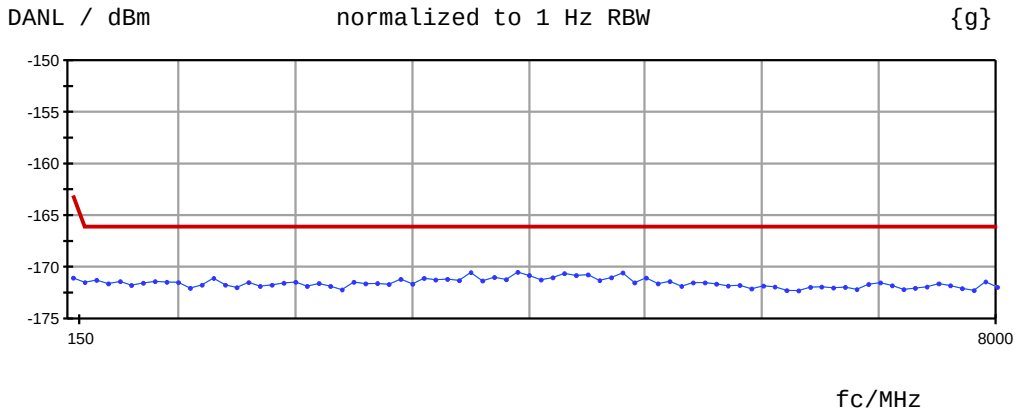
DANL / dBm normalized to 1 Hz RBW {g}



15. Noise Display (DANL) with LN preamplifier on (ESW-B24)

fc		DUL	Actual	MU {g}
150 kHz	(1 Hz BW)	-130 dBm	-137.86 dBm	0.01 dB
998 kHz	(1 Hz BW)	-130 dBm	-145.97 dBm	0.01 dB
50 MHz	(1 Hz BW)	-150 dBm	-169.34 dBm	0.01 dB

Incoming Results



16. Absolute level uncertainty at 64 MHz

16.1 Input1, preselector off, preamplifier off

fc	DL	Actual	MU
64 MHz	0.20 dB	-0.07 dB	0.04 dB

16.2 Input1, preselector on, preamplifier off

fc	DL	Actual	MU
64 MHz	0.35 dB	0.11 dB	0.04 dB

16.3 Input1, preselector on, preamplifier on

fc	DL	Actual	MU
64 MHz	0.35 dB	0.13 dB	0.04 dB

LN preamplifier on

Preselector off

fc	DL	Actual	MU
64 MHz	0.20 dB	0.13 dB	0.04 dB

Preselector on

fc	DL	Actual	MU
64 MHz	0.35 dB	0.13 dB	0.04 dB

17. Absolute level uncertainty at 64 MHz, Input 2

17.1 Input2, preselector off, preamplifier off

fc	DL	Actual	MU
64 MHz	0.20 dB	0.04 dB	0.04 dB

17.2 Input2, preselector on, preamplifier off

fc	DL	Actual	MU
64 MHz	0.35 dB	-0.03 dB	0.04 dB

17.3 Input2, preselector on, preamplifier on

fc	DL	Actual	MU
64 MHz	0.35 dB	-0.03 dB	0.04 dB

18. Input 2, LN preamplifier on

Preselector off

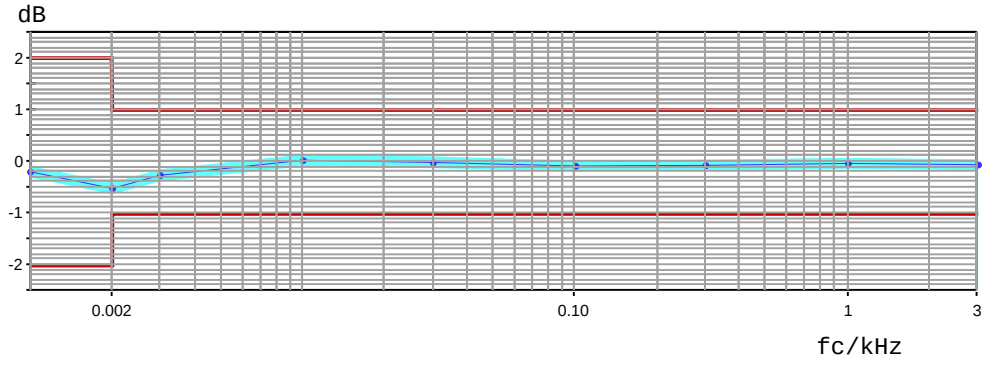
fc	DL	Actual	MU
64 MHz	0.20 dB	0.02 dB	0.04 dB

Preselector on

fc	DL	Actual	MU
64 MHz	0.35 dB	-0.06 dB	0.04 dB

19. Frequency response <9 kHz, Input 1, preselector off, preamplifier off

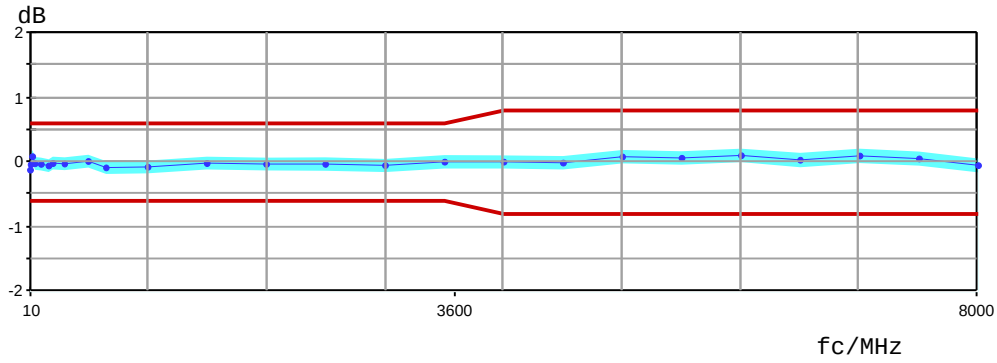
RF attenuation 10 dB, DC coupled



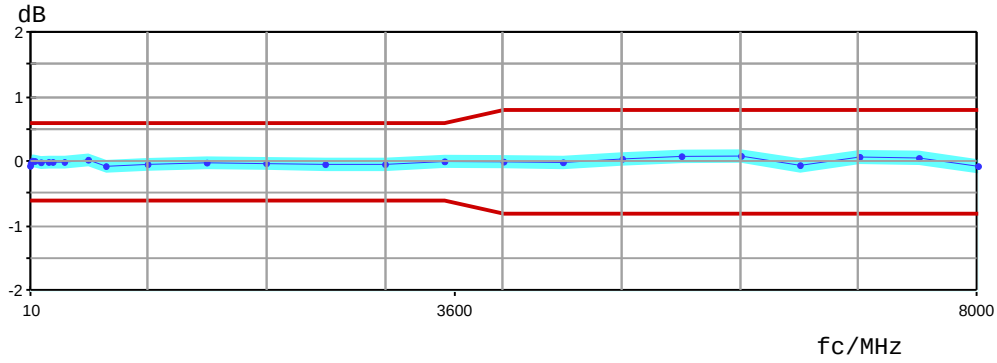
Incoming Results

20. Frequency response, Input 1, preselector off, preamplifier off

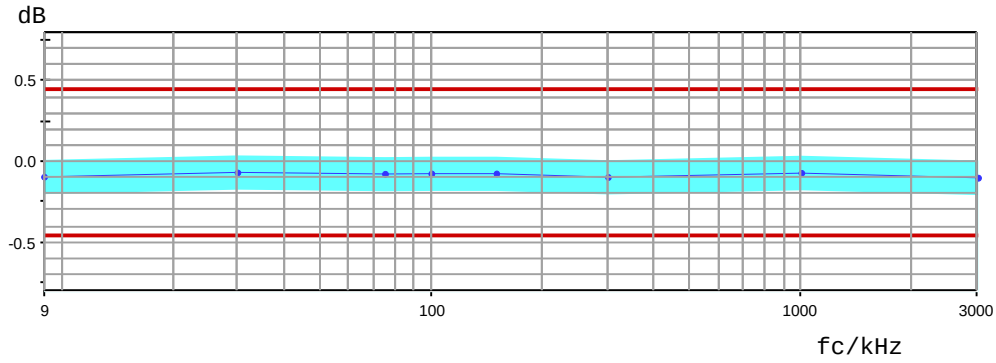
Input 1, RF attenuation 0 dB, AC coupled



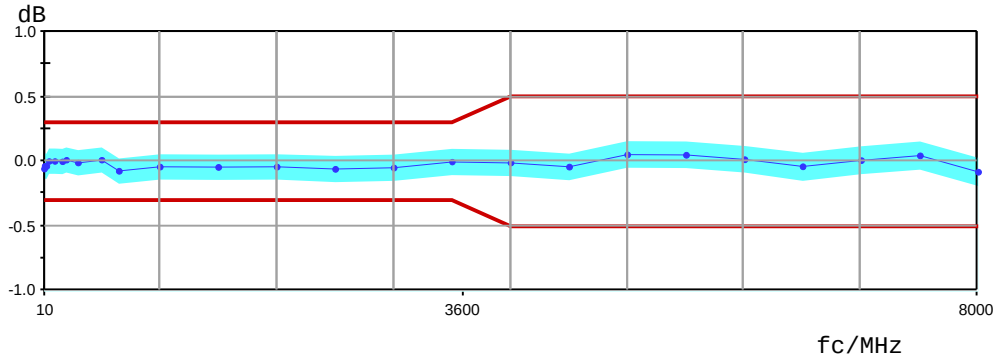
Input 1, RF attenuation 5 dB, AC coupled



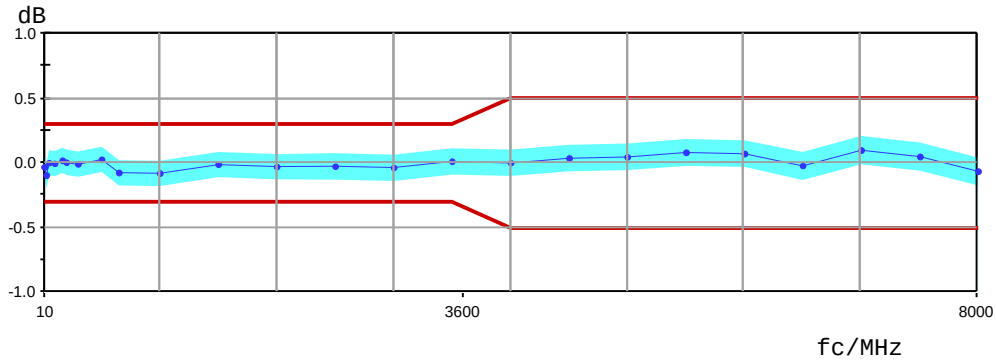
Input 1, RF attenuation 10 dB, DC coupled



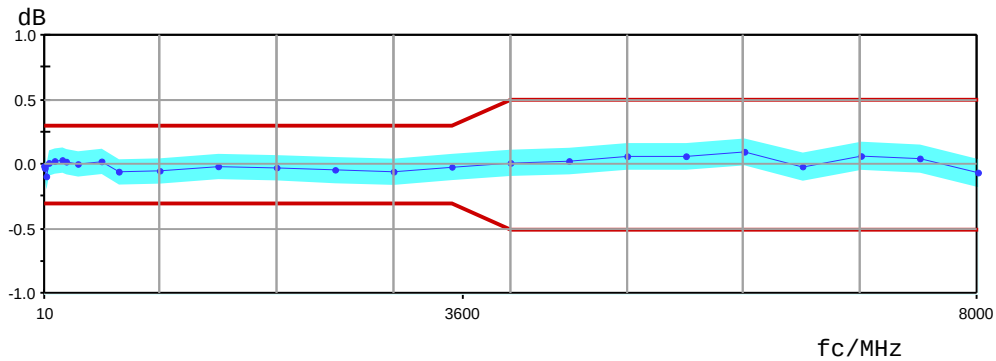
Input 1, RF attenuation 10 dB, AC coupled



Input 1, RF attenuation 20 dB, AC coupled



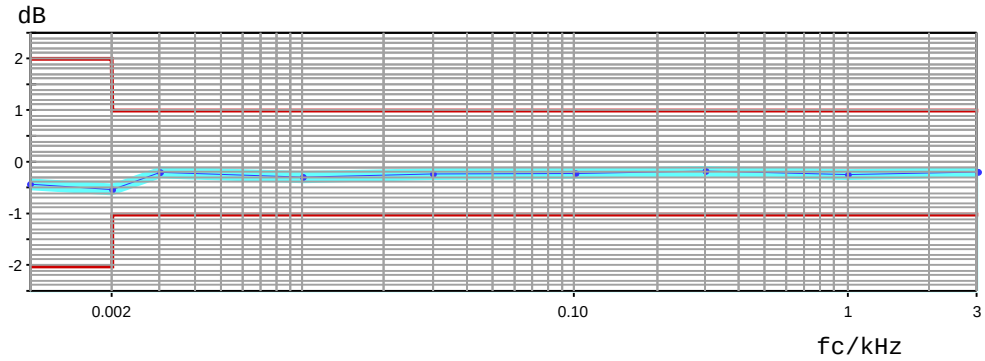
Input 1, RF attenuation 40 dB, AC coupled



Incoming Results

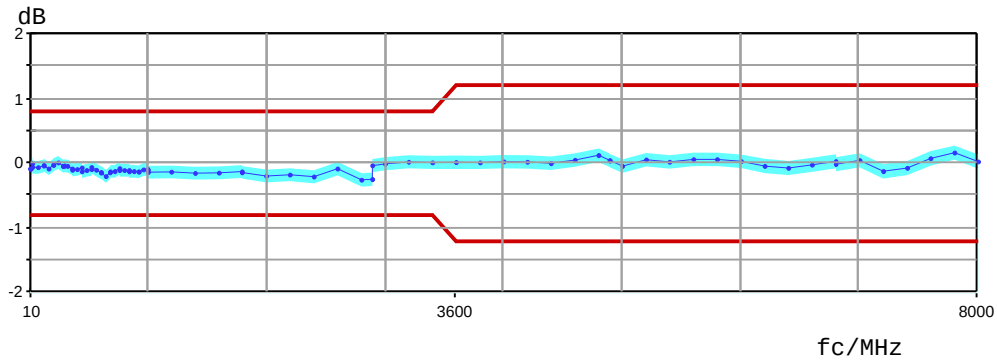
21. Frequency response <9 kHz, Input 1, preselector on, preamplifier off

RF attenuation 10 dB, DC coupled

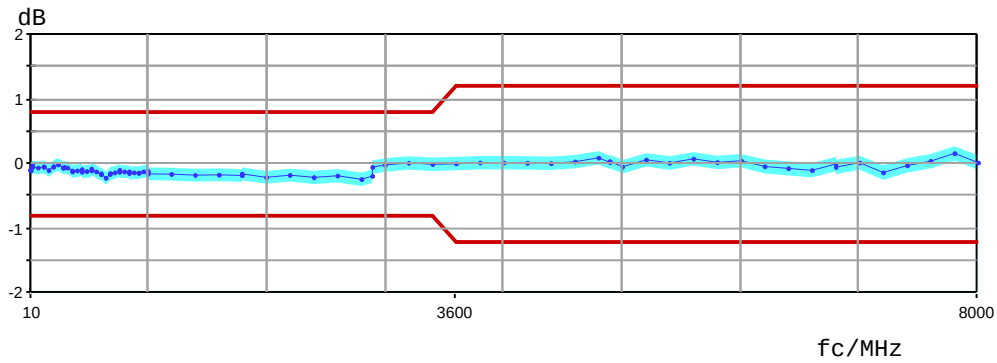


22. Frequency response, Input 1, preselector on, preamplifier off

Input 1, preselector on, Preamplifier off, RF attenuation 0 dB, AC coupled

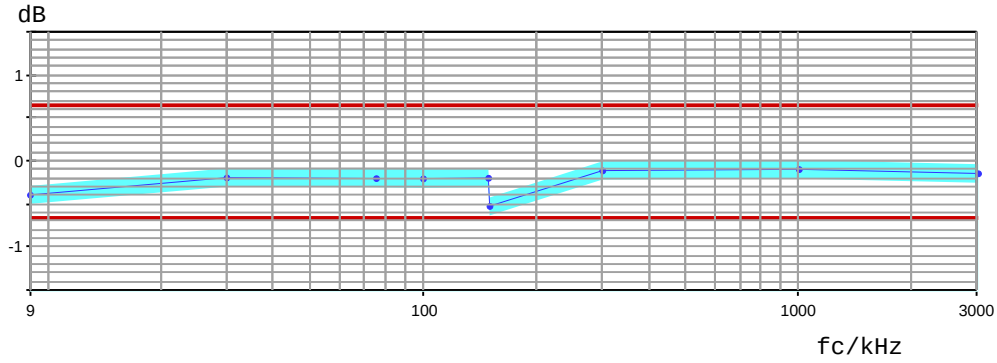


Input 1, preselector on, Preamplifier off, RF attenuation 5 dB, AC coupled

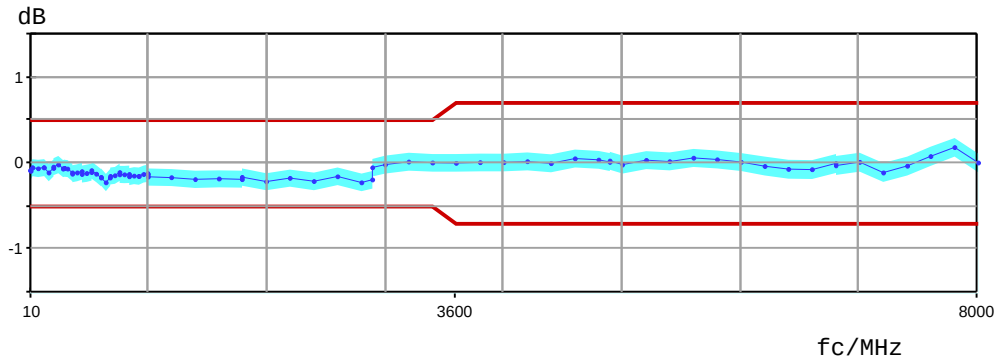


Incoming Results

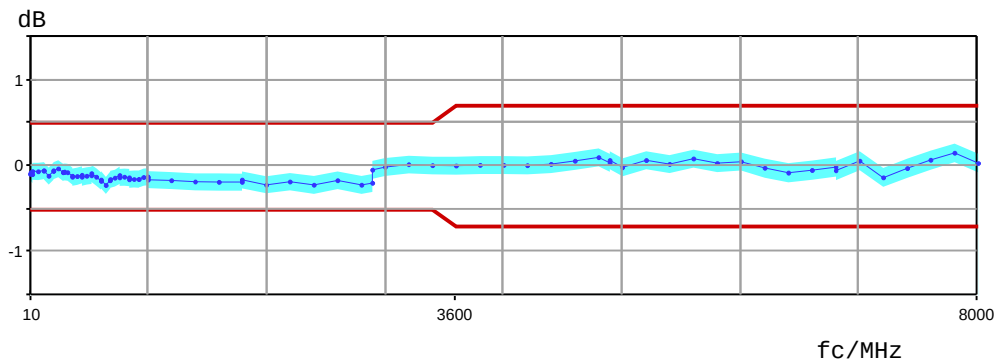
Input 1, preselector on, Preamplifier off, RF attenuation 10 dB, DC coupled



Input 1, preselector on, Preamplifier off, RF attenuation 10 dB, AC coupled

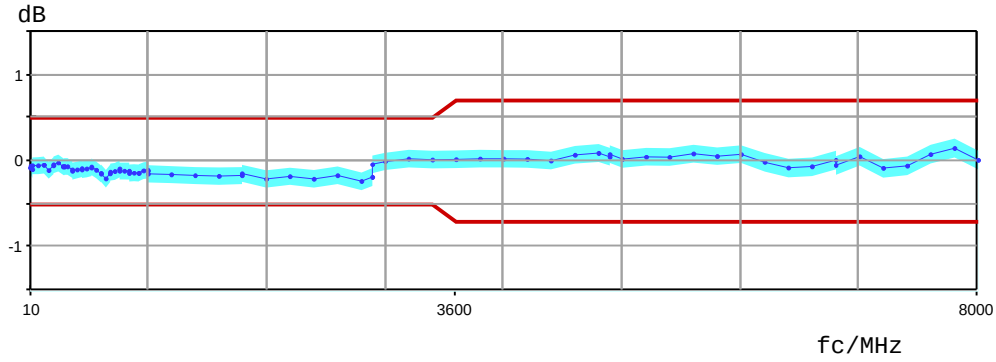


Input 1, preselector on, Preamplifier off, RF attenuation 20 dB, AC coupled



Incoming Results

Input 1, preselector on, Preamplifier off, RF attenuation 40 dB, AC coupled



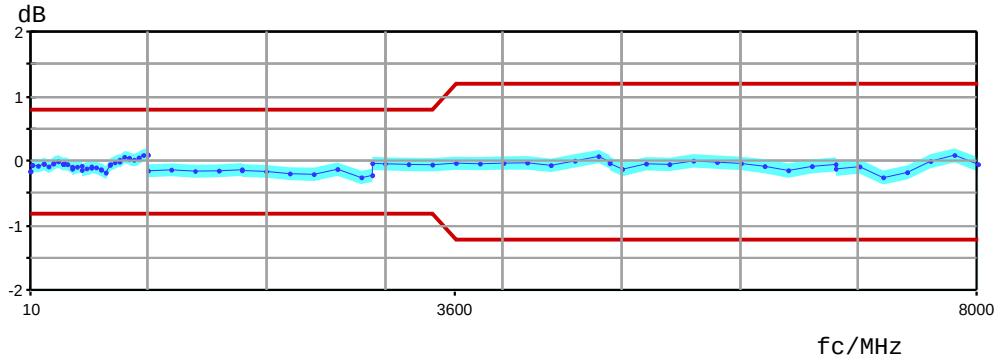
23. Frequency response <9 kHz, Input 1, preselector on, preamplifier on

RF attenuation 10 dB, DC coupled

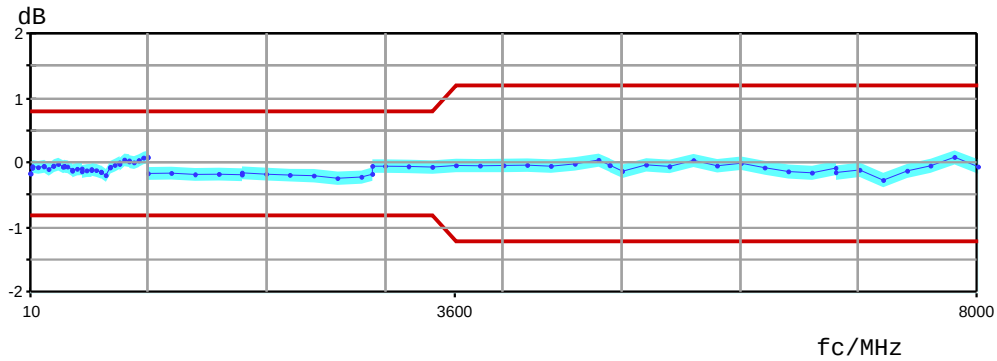
fc	DL	Actual	MU
1.000 kHz	1.00 dB	-0.28 dB	0.11 dB

24. Frequency response, Input 1, preselector on, preamplifier on

Input 1, preselector on, Preamplifier on, RF attenuation 0 dB, AC coupled

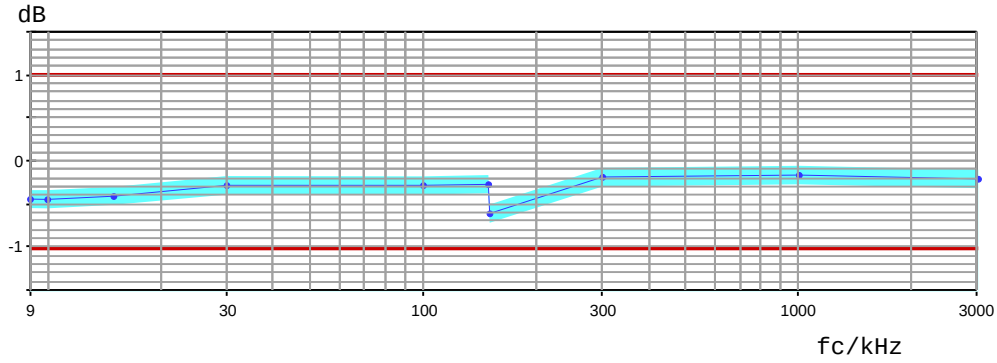


Input 1, preselector on, Preamplifier on, RF attenuation 5 dB, AC coupled

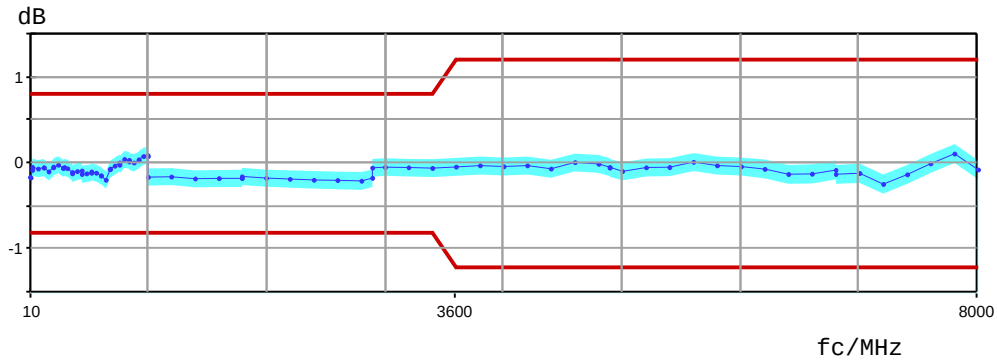


Incoming Results

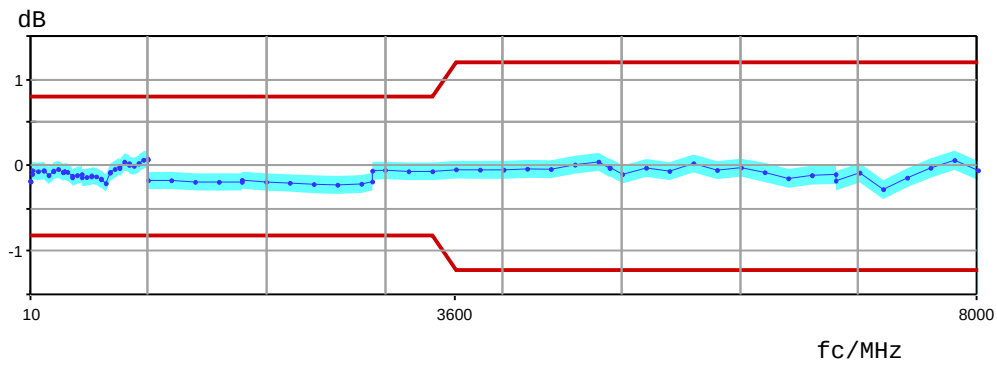
Input 1, preselector on, Preamplifier on, RF attenuation 10 dB, DC coupled



Input 1, preselector on, Preamplifier on, RF attenuation 10 dB, AC coupled

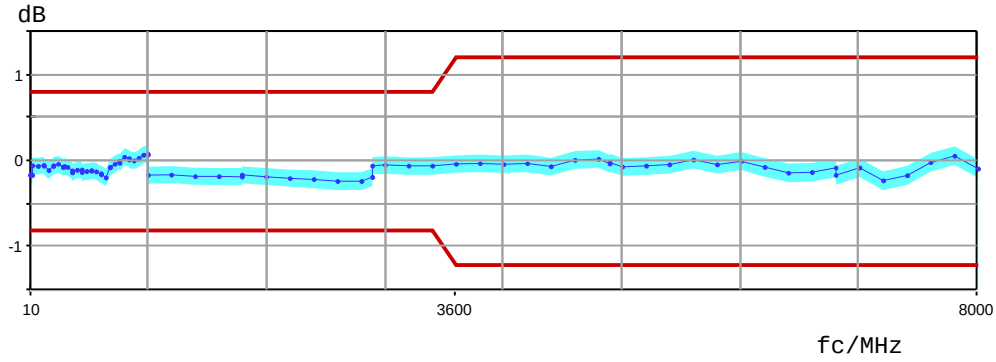


Input 1, preselector on, Preamplifier on, RF attenuation 20 dB, AC coupled

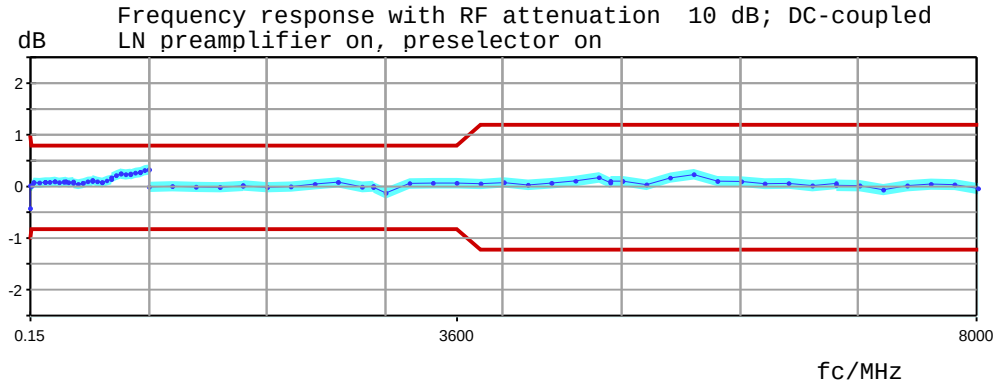


Incoming Results

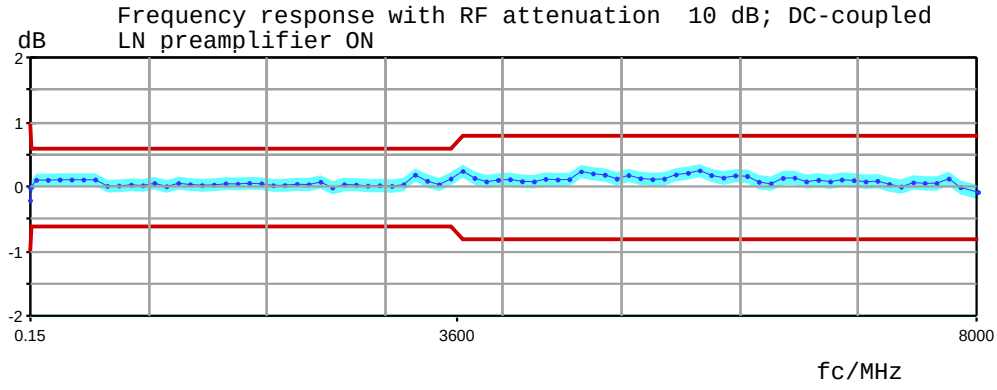
Input 1, preselector on, Preamplifier on, RF attenuation 40 dB, AC coupled



25. Frequency response, Input 1, LN preamplifier on, preselector on



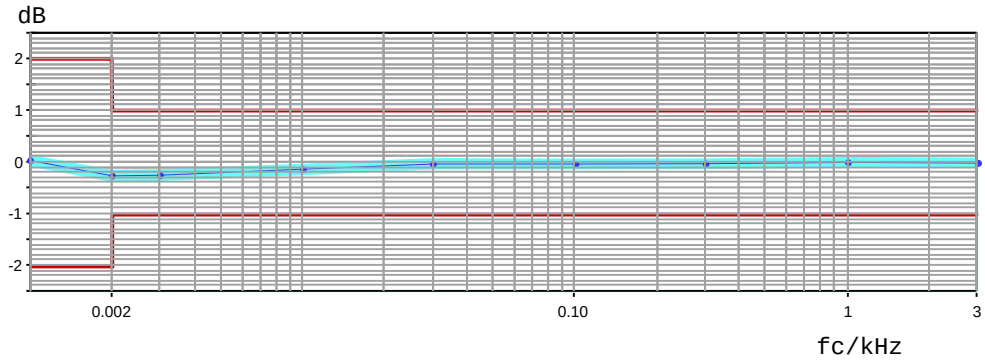
26. Frequency response, Input 1, LN preamplifier on



Incoming Results

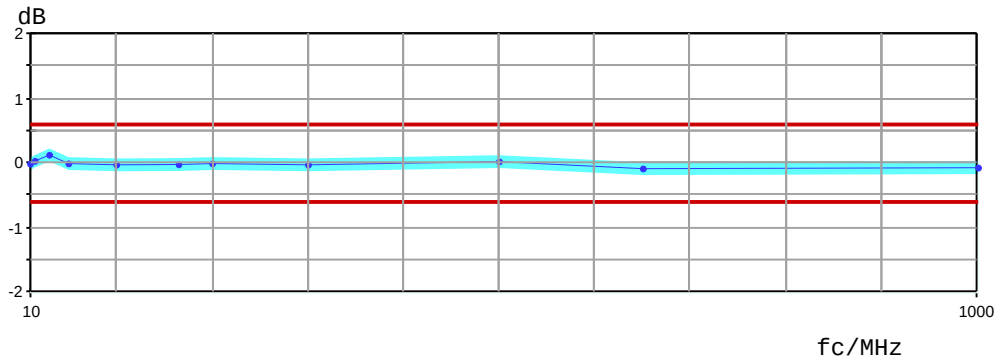
Frequency response <9 kHz, Input 2, preselector off, preamplifier off

Input 2, RF attenuation 10 dB, DC coupled

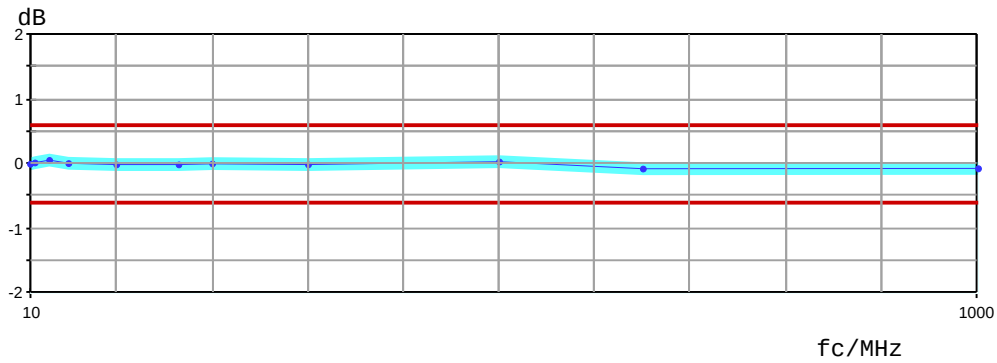


27. Frequency response, Input 2, preselector off, preamplifier off

Input 2, RF attenuation 0 dB, AC coupled

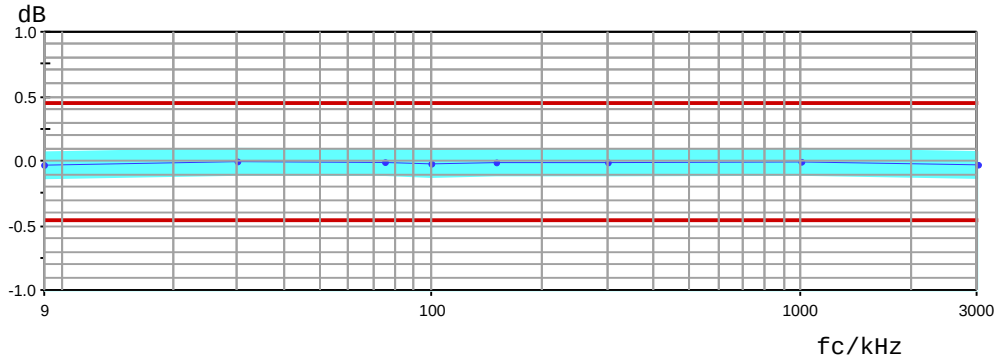


Input 2, RF attenuation 5 dB, AC coupled

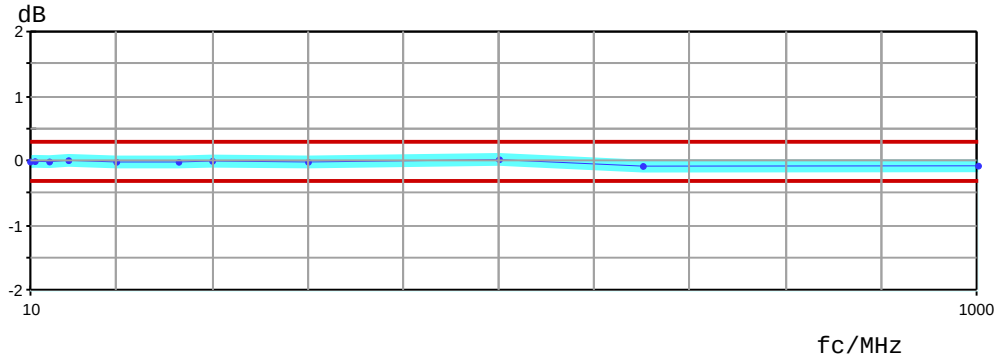


Incoming Results

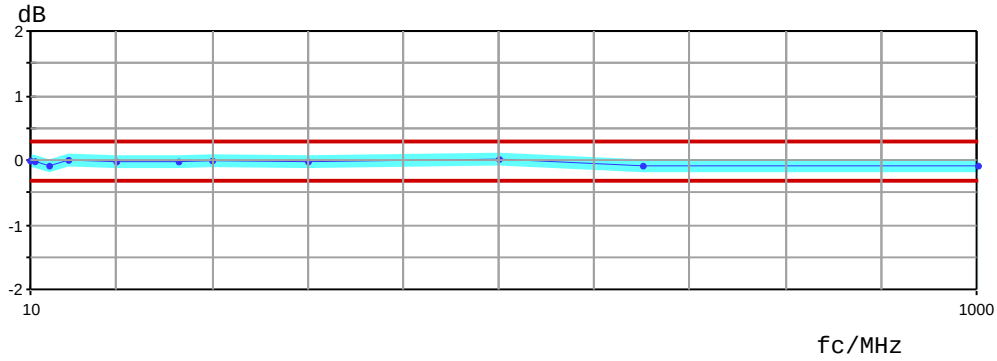
Input 2, RF attenuation 10 dB, DC coupled



Input 2, RF attenuation 10 dB, AC coupled

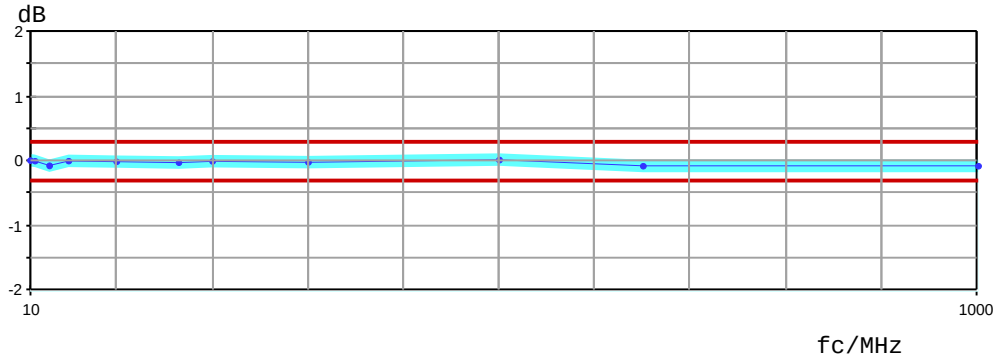


Input 2, RF attenuation 20 dB, AC coupled



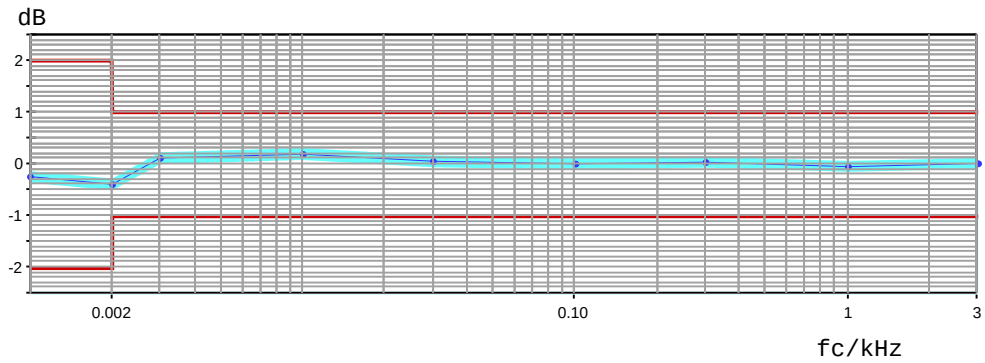
Incoming Results

Input 2, RF attenuation 40 dB, AC coupled



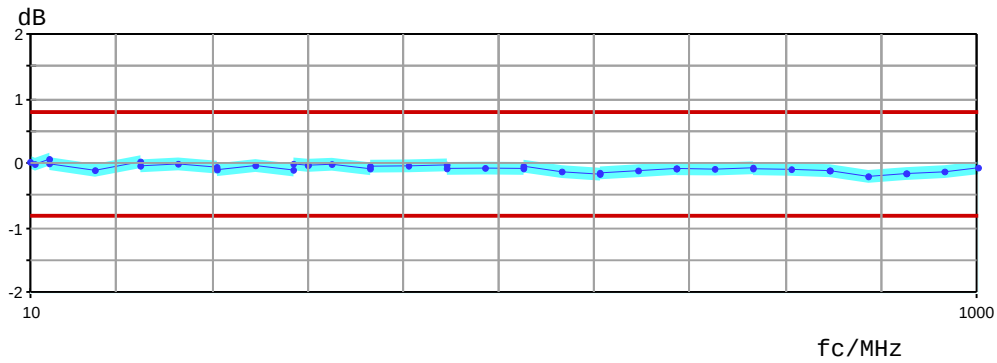
28. Frequency response <9 kHz, Input 2, preselector on, preamplifier off

Input 2, RF attenuation 10 dB, DC coupled



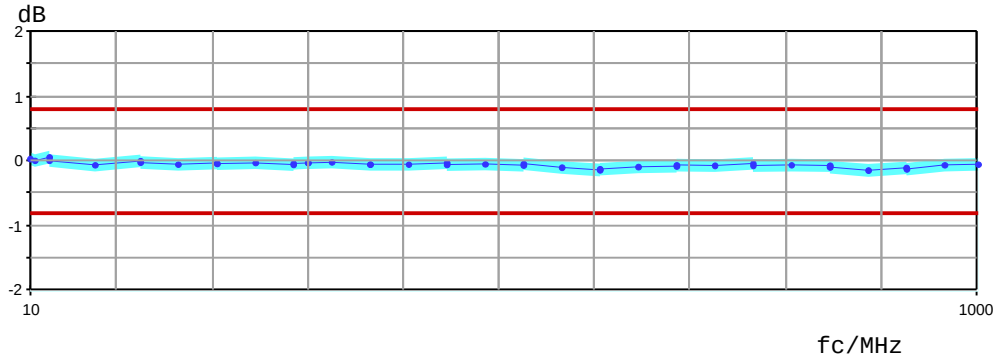
29. Frequency response, Input 2, preselector on, preamplifier off

Input 2, preselector on, Preamplifier off, RF attenuation 0 dB, AC coupled

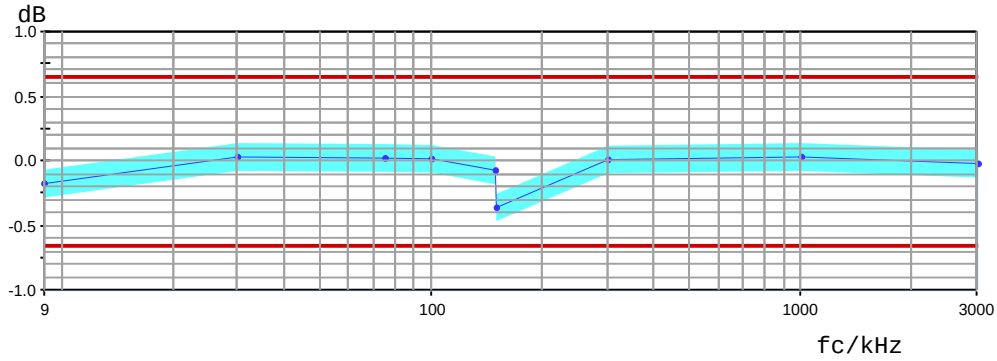


Incoming Results

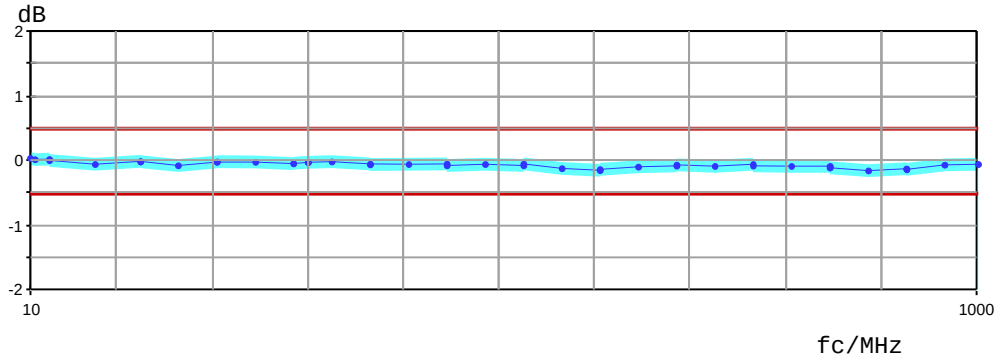
Input 2, preselector on, Preamplifier off, RF attenuation 5 dB, AC coupled



Input 2, preselector on, Preamplifier off, RF attenuation 10 dB, DC coupled

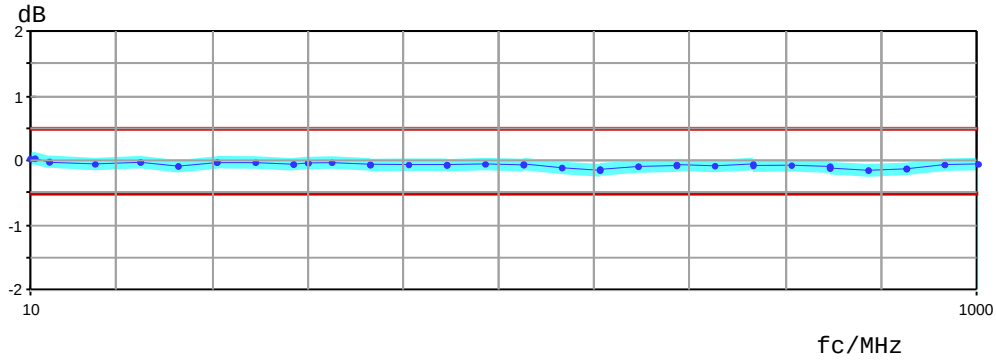


Input 2, preselector on, Preamplifier off, RF attenuation 10 dB, AC coupled

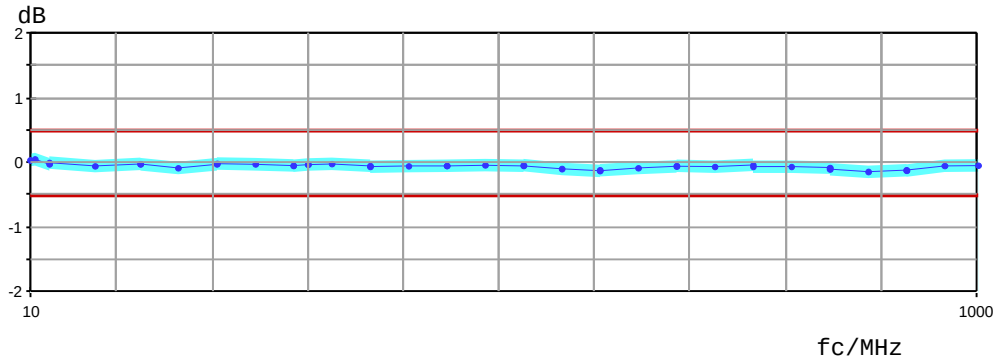


Incoming Results

Input 2, preselector on, Preamplifier off, RF attenuation 20 dB, AC coupled



Input 2, preselector on, Preamplifier off, RF attenuation 40 dB, AC coupled



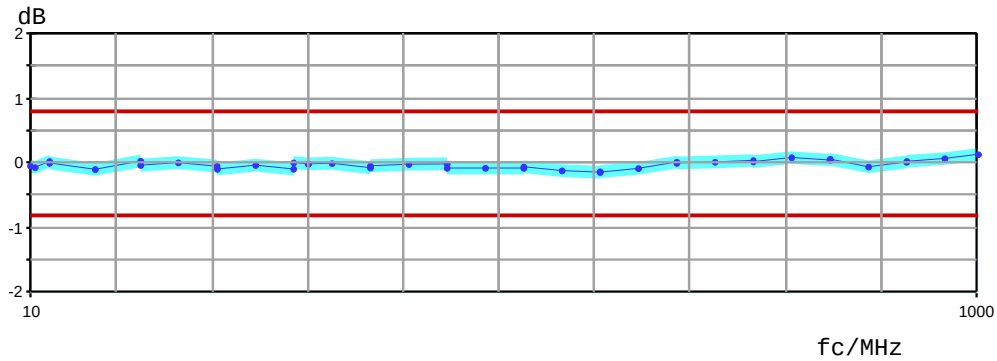
30. Frequency response <9 kHz, Input 2, preselector on, preamplifier on

Input 2, RF attenuation 10 dB, DC coupled

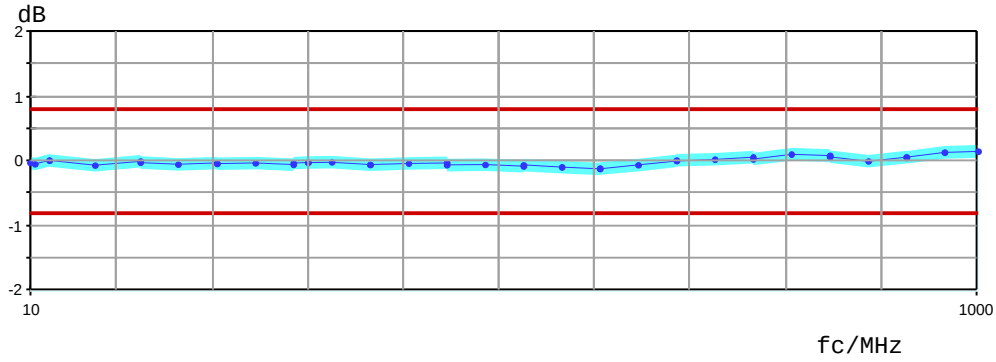
fc	DL	Actual	MU
1.000 kHz	1.00 dB	-0.04 dB	0.11 dB

31. Frequency response, Input 2, preselector on, preamplifier on

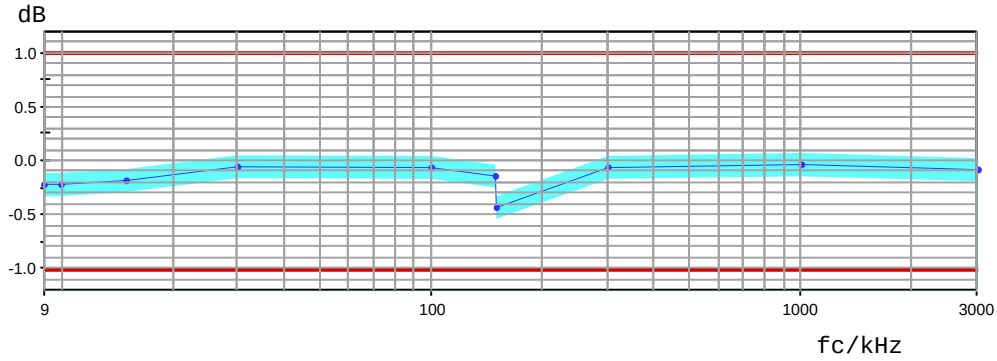
Input 2, preselector on, Preamplifier on, RF attenuation 0 dB, AC coupled



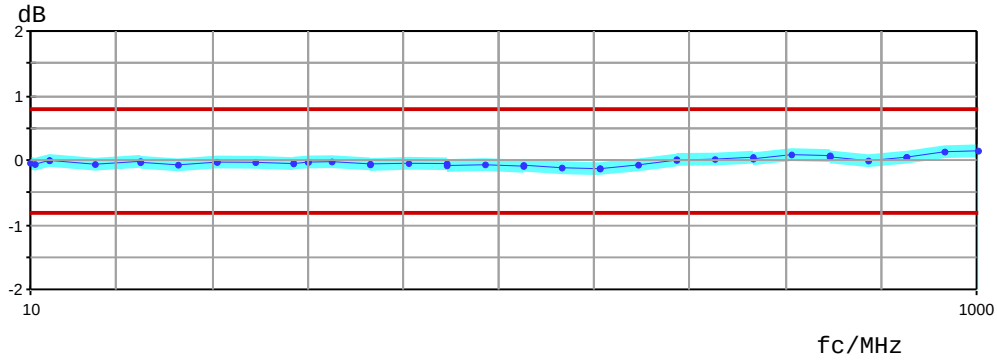
Input 2, preselector on, Preamplifier on, RF attenuation 5 dB, AC coupled



Input 2, preselector on, Preamplifier on, RF attenuation 10 dB, DC coupled

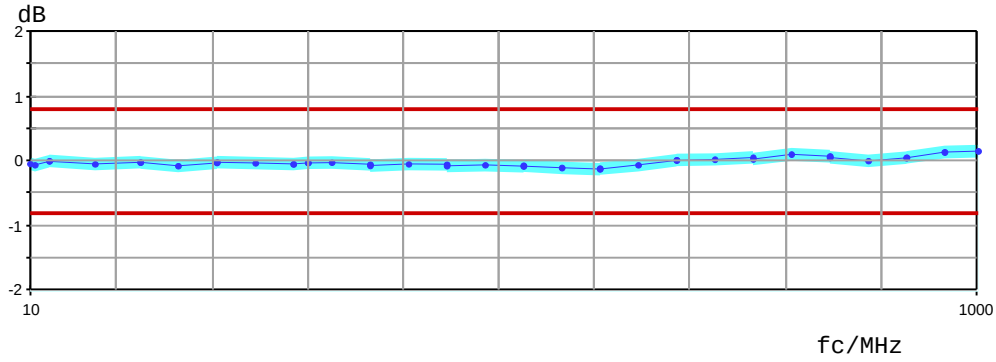


Input 2, preselector on, Preamplifier on, RF attenuation 10 dB, AC coupled

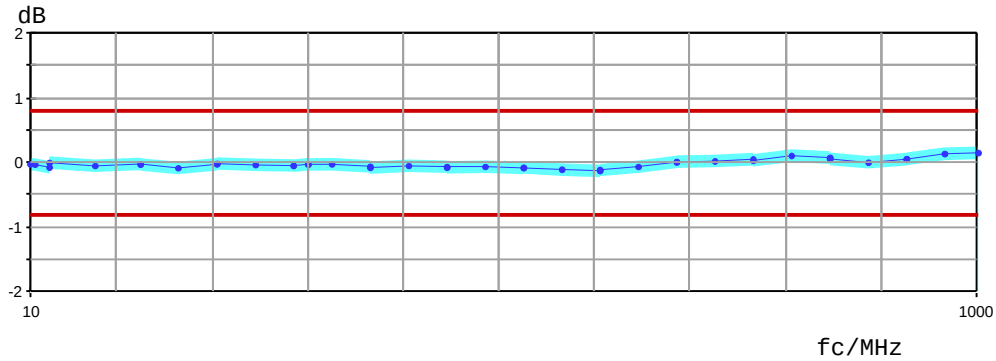


Incoming Results

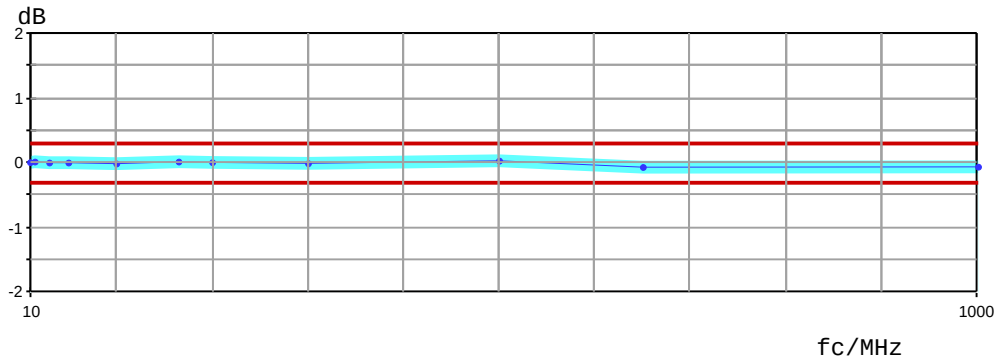
Input 2, preselector on, Preamplifier on, RF attenuation 20 dB, AC coupled



Input 2, preselector on, Preamplifier on, RF attenuation 40 dB, AC coupled

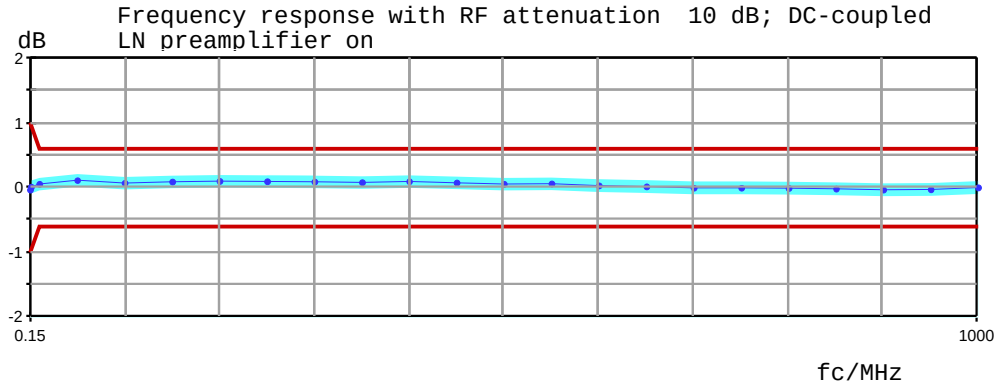


Frequency response, Input 2, RF attenuation 10 dB, Limiter ON

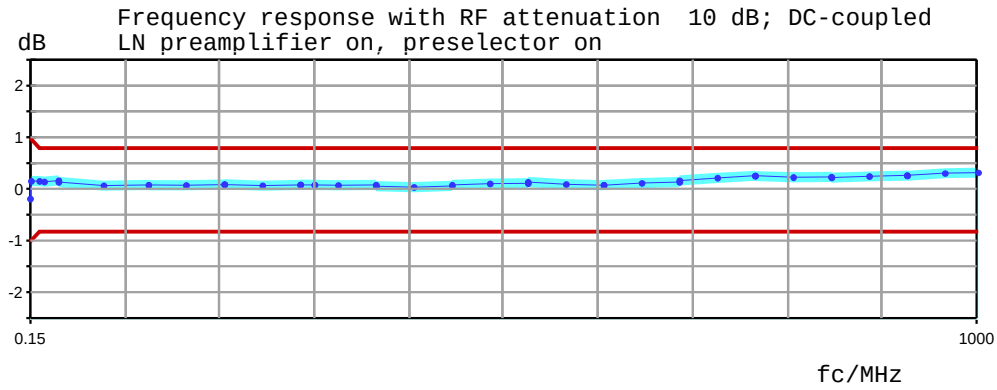


Incoming Results

32. Frequency response, Input 2, LN preamplifier on

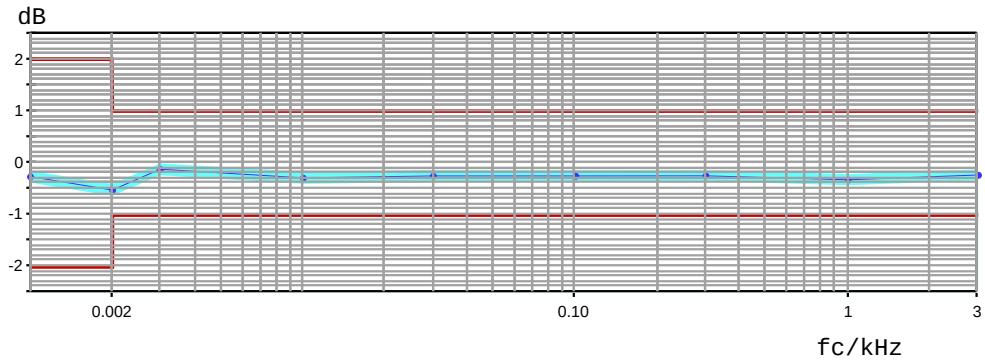


33. Frequency response, Input 2, LN preamplifier on, preselector on



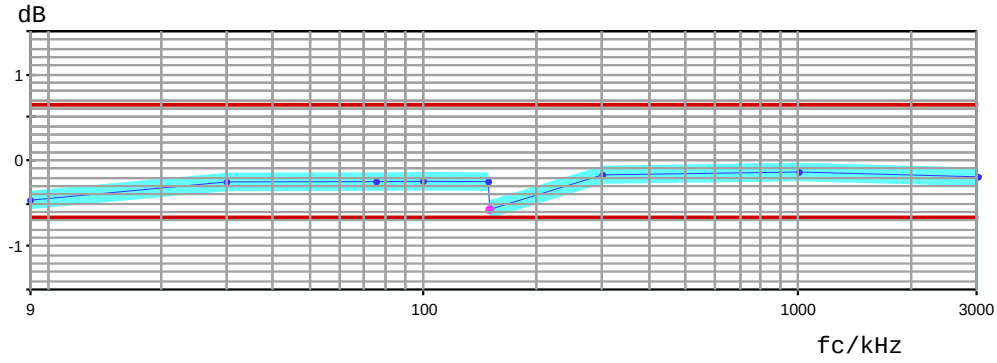
34. Frequency response in receiver mode

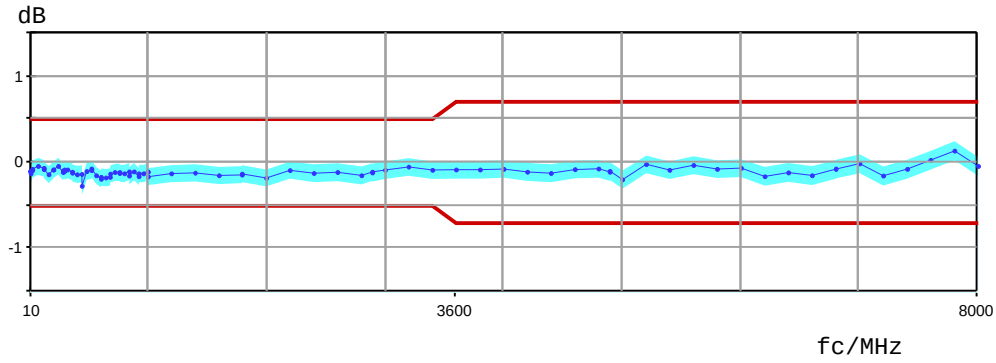
RF attenuation 10 dB, DC coupled



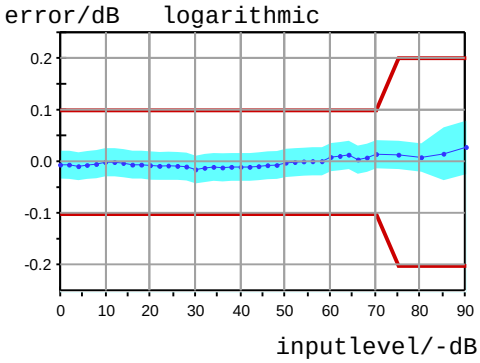
Incoming Results

UGB1(1)

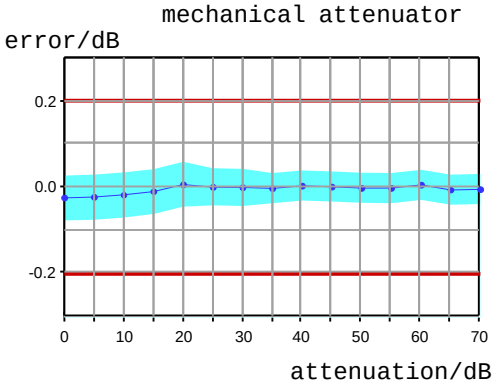




35. Display nonlinearity



36. Attenuator switching uncertainty



Incoming Results

37. Checking the Phase Noise

carrier	carrier offset	DUL / dBc(1Hz)	Actual/ dBc(1Hz)	
1000.0 MHz	1.0 MHz	-145	-149.54	{a,g}
1000.0 MHz	100.0 kHz	-136	-143.64	{a,g}
1000.0 MHz	10.0 kHz	-134	-140.24	{a,g}
1000.0 MHz	1.0 kHz	-125	-131.90	{a,g}

38. Return Loss at the RF Input 1

RF attenuation 0 dB, Input 1, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	2.00	1.20	0.05
1.008 MHz	2.00	1.53	0.05
2.007 MHz	2.00	1.53	0.05
3.006 MHz	2.00	1.52	0.05
4.005 MHz	2.00	1.52	0.05
5.005 MHz	2.00	1.52	0.05
6.004 MHz	2.00	1.51	0.05
7.003 MHz	2.00	1.50	0.05
8.002 MHz	2.00	1.49	0.05
9.002 MHz	2.00	1.48	0.05
10.000 MHz	2.00	1.47	0.05

RF attenuation 5 dB, Input 1, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.50	1.07	0.05
1.008 MHz	1.50	1.15	0.05
2.007 MHz	1.50	1.15	0.05
3.006 MHz	1.50	1.15	0.05
4.005 MHz	1.50	1.15	0.05
5.005 MHz	1.50	1.15	0.05
6.004 MHz	1.50	1.15	0.05
7.003 MHz	1.50	1.15	0.05
8.002 MHz	1.50	1.14	0.05
9.002 MHz	1.50	1.14	0.05
10.000 MHz	1.50	1.14	0.05

RF attenuation 10 dB, Input 1, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.03	0.05
1.008 MHz	1.20	1.05	0.05
2.007 MHz	1.20	1.05	0.05
3.006 MHz	1.20	1.05	0.05
4.005 MHz	1.20	1.05	0.05
5.005 MHz	1.20	1.05	0.05
6.004 MHz	1.20	1.05	0.05
7.003 MHz	1.20	1.05	0.05
8.002 MHz	1.20	1.05	0.05
9.002 MHz	1.20	1.05	0.05
10.000 MHz	1.20	1.05	0.05

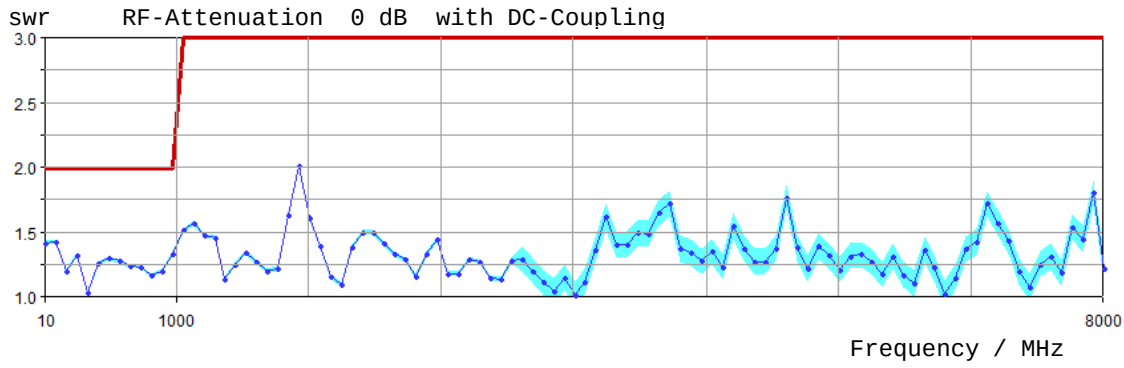
RF attenuation 20 dB, Input 1, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.02	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.01	0.05
5.005 MHz	1.20	1.01	0.05
6.004 MHz	1.20	1.01	0.05
7.003 MHz	1.20	1.01	0.05
8.002 MHz	1.20	1.01	0.05
9.002 MHz	1.20	1.01	0.05
10.000 MHz	1.20	1.01	0.05

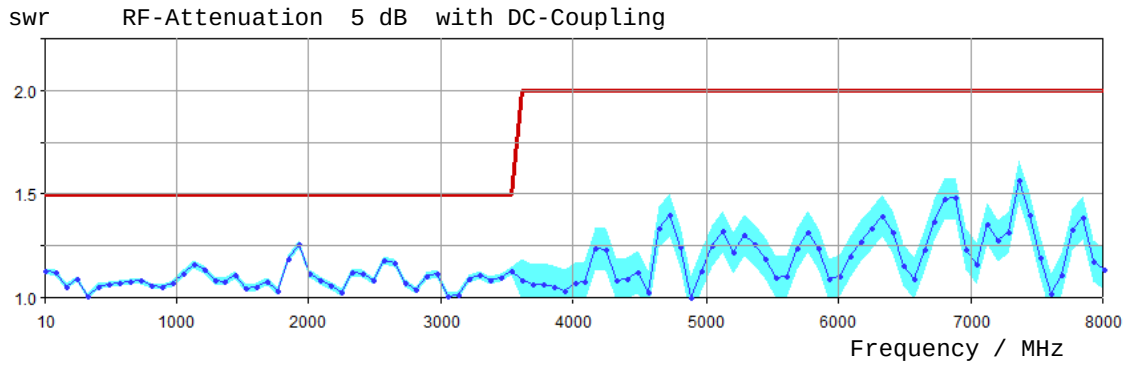
RF attenuation 40 dB, Input 1, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.02	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.01	0.05
5.005 MHz	1.20	1.01	0.05
6.004 MHz	1.20	1.00	0.05
7.003 MHz	1.20	1.01	0.05
8.002 MHz	1.20	1.01	0.05
9.002 MHz	1.20	1.00	0.05
10.000 MHz	1.20	1.01	0.05

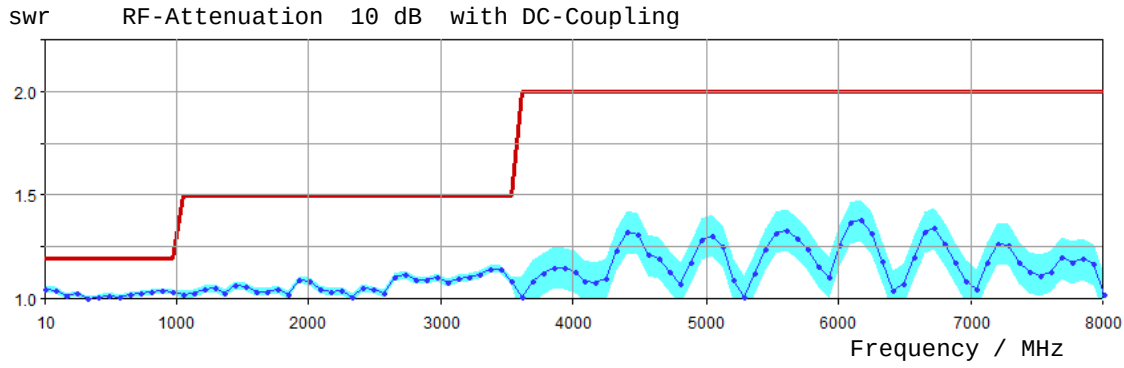
RF attenuation 0 dB, Input 1, DC coupled, preselector off, preamplifier off



RF attenuation 5 dB, Input 1, DC coupled, preselector off, preamplifier off

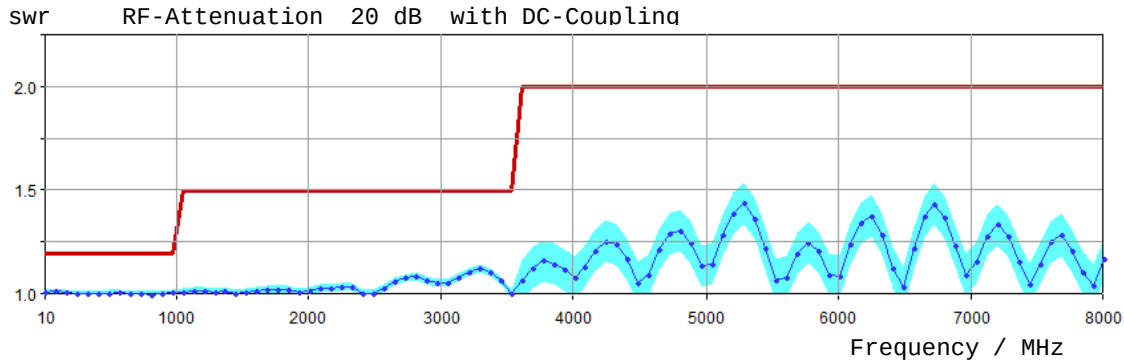


RF attenuation 10 dB, Input 1, DC coupled, preselector off, preamplifier off

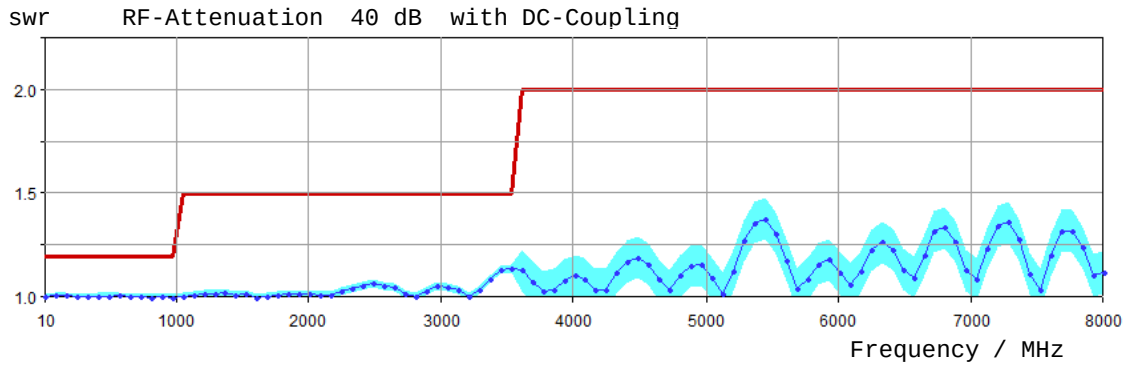


Incoming Results

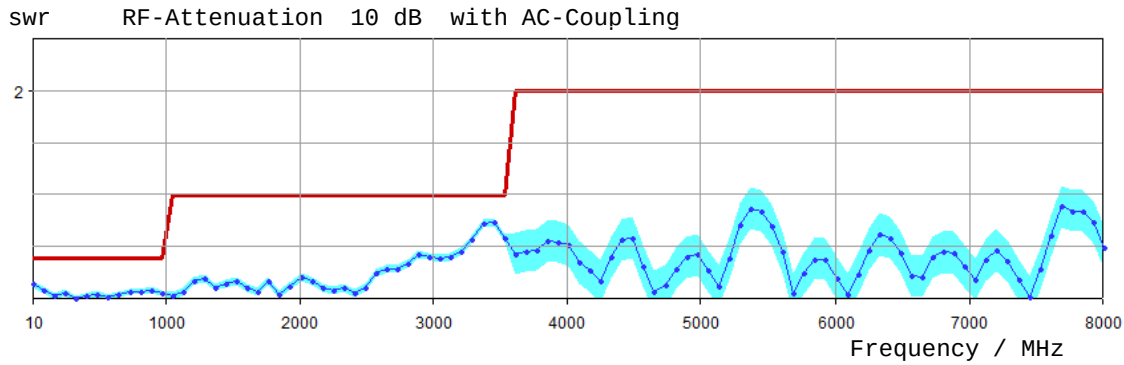
RF attenuation 20 dB, Input 1, DC coupled, preselector off, preamplifier off



RF attenuation 40 dB, Input 1, DC coupled, preselector off, preamplifier off



RF attenuation 10 dB, Input 1, AC coupled, preselector off, preamplifier off



Incoming Results

39. Return Loss at the RF Input 1 with preselector

RF attenuation 0 dB, Input 1, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	2.00	1.08	0.05
1.008 MHz	2.00	1.52	0.05
2.007 MHz	2.00	1.54	0.05
3.006 MHz	2.00	1.55	0.05
4.005 MHz	2.00	1.58	0.05
5.005 MHz	2.00	1.60	0.05
6.004 MHz	2.00	1.60	0.05
7.003 MHz	2.00	1.60	0.05
8.002 MHz	2.00	1.58	0.05
9.002 MHz	2.00	1.54	0.05
10.000 MHz	2.00	1.49	0.05

RF attenuation 5 dB, Input 1, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.50	1.03	0.05
1.008 MHz	1.50	1.14	0.05
2.007 MHz	1.50	1.14	0.05
3.006 MHz	1.50	1.14	0.05
4.005 MHz	1.50	1.15	0.05
5.005 MHz	1.50	1.16	0.05
6.004 MHz	1.50	1.16	0.05
7.003 MHz	1.50	1.16	0.05
8.002 MHz	1.50	1.16	0.05
9.002 MHz	1.50	1.15	0.05
10.000 MHz	1.50	1.14	0.05

RF attenuation 10 dB, Input 1, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.02	0.05
1.008 MHz	1.20	1.05	0.05
2.007 MHz	1.20	1.04	0.05
3.006 MHz	1.20	1.04	0.05
4.005 MHz	1.20	1.04	0.05
5.005 MHz	1.20	1.05	0.05
6.004 MHz	1.20	1.05	0.05
7.003 MHz	1.20	1.05	0.05
8.002 MHz	1.20	1.05	0.05
9.002 MHz	1.20	1.05	0.05
10.000 MHz	1.20	1.05	0.05

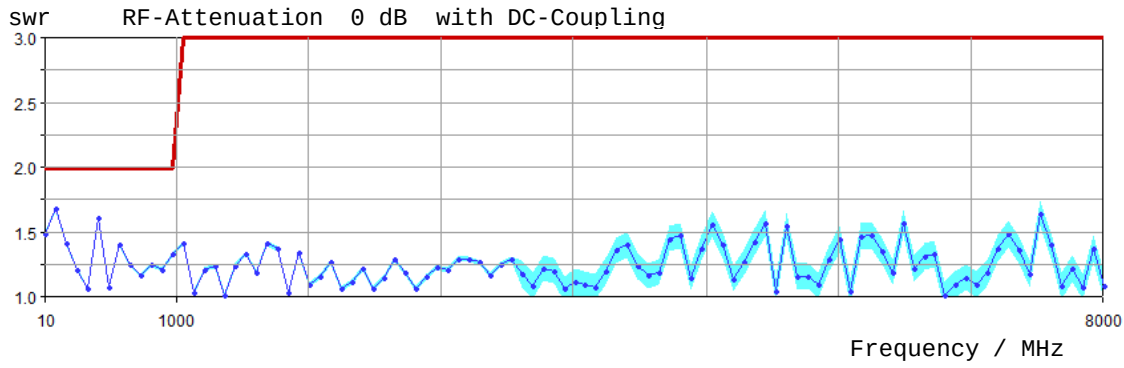
RF attenuation 20 dB, Input 1, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.02	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.00	0.05
3.006 MHz	1.20	1.00	0.05
4.005 MHz	1.20	1.00	0.05
5.005 MHz	1.20	1.01	0.05
6.004 MHz	1.20	1.01	0.05
7.003 MHz	1.20	1.01	0.05
8.002 MHz	1.20	1.02	0.05
9.002 MHz	1.20	1.01	0.05
10.000 MHz	1.20	1.01	0.05

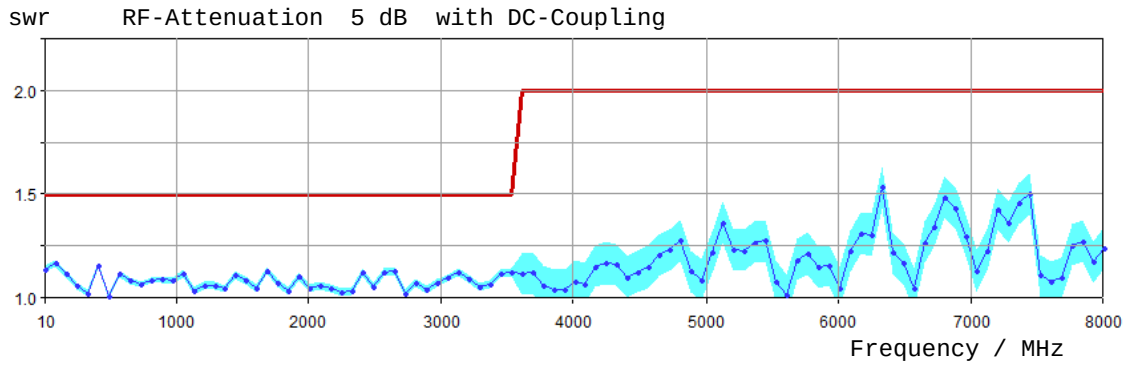
RF attenuation 40 dB, Input 1, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.02	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.00	0.05
4.005 MHz	1.20	1.00	0.05
5.005 MHz	1.20	1.01	0.05
6.004 MHz	1.20	1.01	0.05
7.003 MHz	1.20	1.01	0.05
8.002 MHz	1.20	1.01	0.05
9.002 MHz	1.20	1.01	0.05
10.000 MHz	1.20	1.01	0.05

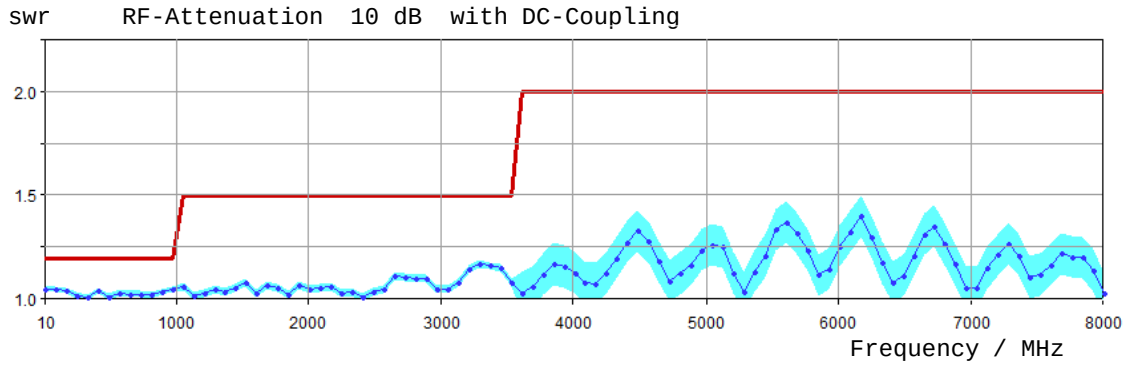
RF attenuation 0 dB, Input 1, DC coupled, preselector on, preamplifier off



RF attenuation 5 dB, Input 1, DC coupled, preselector on, preamplifier off

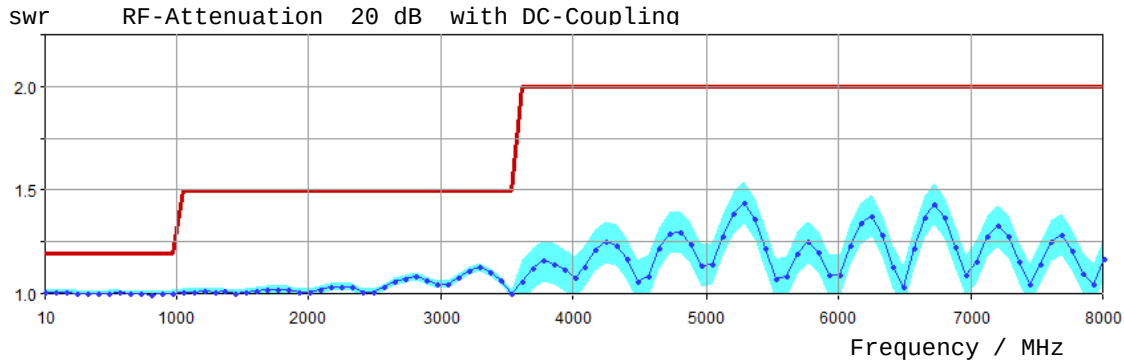


RF attenuation 10 dB, Input 1, DC coupled, preselector on, preamplifier off

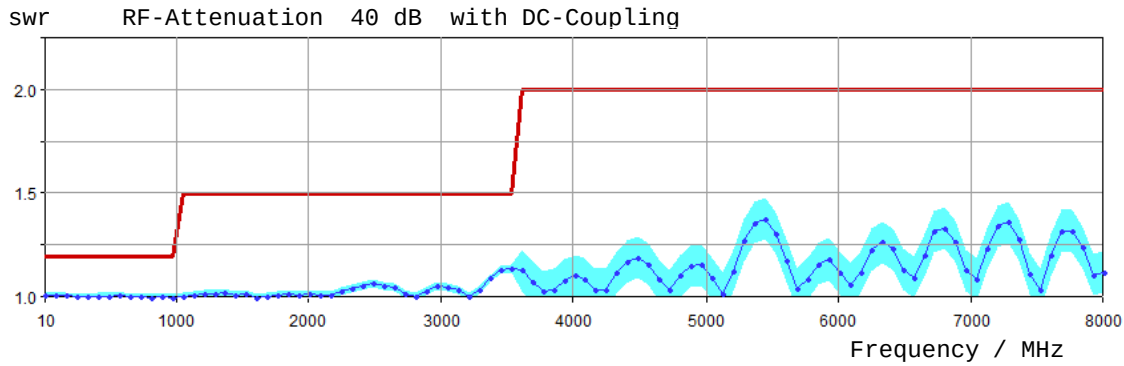


Incoming Results

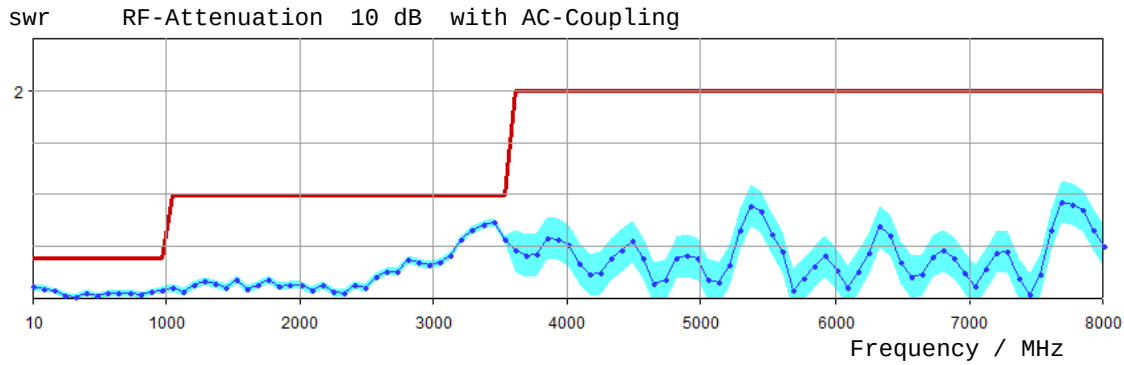
RF attenuation 20 dB, Input 1, DC coupled, preselector on, preamplifier off



RF attenuation 40 dB, Input 1, DC coupled, preselector on, preamplifier off



RF attenuation 10 dB, Input 1, AC coupled, preselector on, preamplifier off



Incoming Results

40. Return Loss at the RF Input 1 with preselector and preamplifier

RF attenuation 0 dB, Input 1, DC coupled, preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	2.00	1.08	0.05
1.008 MHz	2.00	1.52	0.05
2.007 MHz	2.00	1.54	0.05
3.006 MHz	2.00	1.55	0.05
4.005 MHz	2.00	1.58	0.05
5.005 MHz	2.00	1.60	0.05
6.004 MHz	2.00	1.60	0.05
7.003 MHz	2.00	1.60	0.05
8.002 MHz	2.00	1.58	0.05
9.002 MHz	2.00	1.54	0.05
10.000 MHz	2.00	1.49	0.05

RF attenuation 5 dB, Input 1, DC coupled, preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.50	1.03	0.05
1.008 MHz	1.50	1.14	0.05
2.007 MHz	1.50	1.14	0.05
3.006 MHz	1.50	1.14	0.05
4.005 MHz	1.50	1.15	0.05
5.005 MHz	1.50	1.16	0.05
6.004 MHz	1.50	1.16	0.05
7.003 MHz	1.50	1.16	0.05
8.002 MHz	1.50	1.16	0.05
9.002 MHz	1.50	1.15	0.05
10.000 MHz	1.50	1.14	0.05

RF attenuation 10 dB, Input 1, DC coupled, preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.02	0.05
1.008 MHz	1.20	1.05	0.05
2.007 MHz	1.20	1.04	0.05
3.006 MHz	1.20	1.04	0.05
4.005 MHz	1.20	1.05	0.05
5.005 MHz	1.20	1.05	0.05
6.004 MHz	1.20	1.05	0.05
7.003 MHz	1.20	1.05	0.05
8.002 MHz	1.20	1.05	0.05
9.002 MHz	1.20	1.05	0.05
10.000 MHz	1.20	1.05	0.05

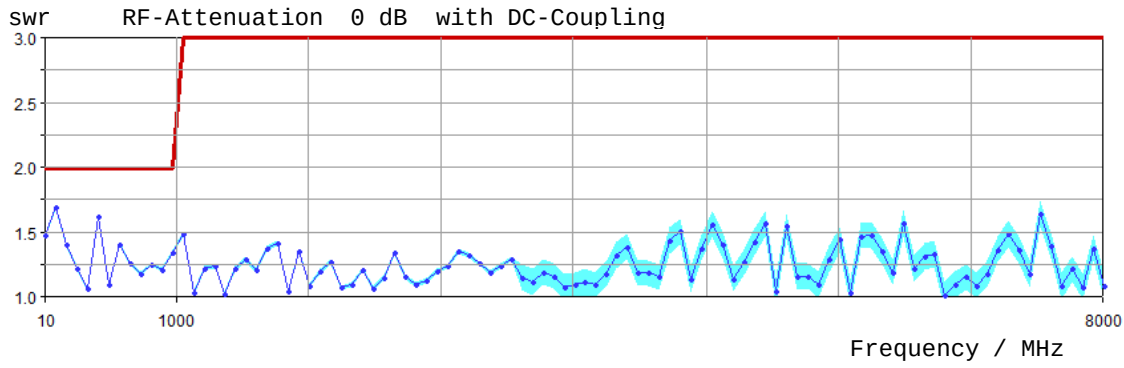
RF attenuation 20 dB, Input 1, DC coupled, preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.02	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.01	0.05
5.005 MHz	1.20	1.01	0.05
6.004 MHz	1.20	1.00	0.05
7.003 MHz	1.20	1.01	0.05
8.002 MHz	1.20	1.01	0.05
9.002 MHz	1.20	1.01	0.05
10.000 MHz	1.20	1.01	0.05

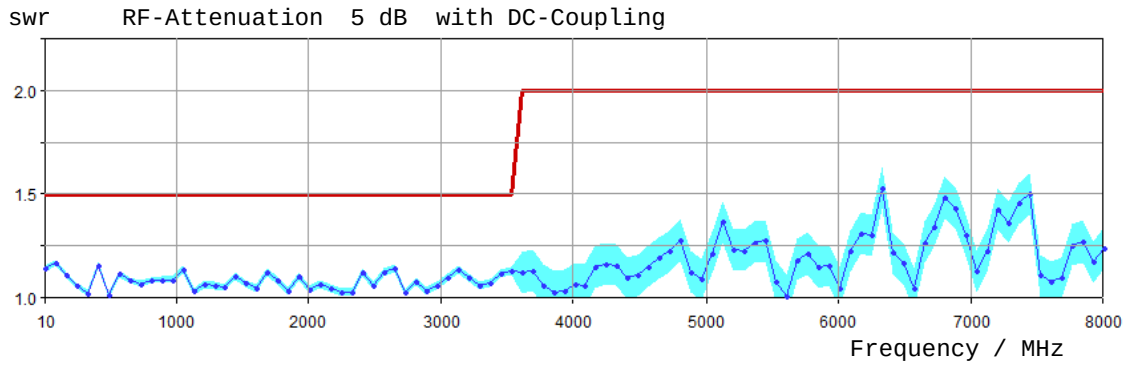
RF attenuation 40 dB, Input 1, DC coupled, preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.02	0.05
1.008 MHz	1.20	1.00	0.05
2.007 MHz	1.20	1.00	0.05
3.006 MHz	1.20	1.00	0.05
4.005 MHz	1.20	1.01	0.05
5.005 MHz	1.20	1.01	0.05
6.004 MHz	1.20	1.00	0.05
7.003 MHz	1.20	1.01	0.05
8.002 MHz	1.20	1.01	0.05
9.002 MHz	1.20	1.01	0.05
10.000 MHz	1.20	1.01	0.05

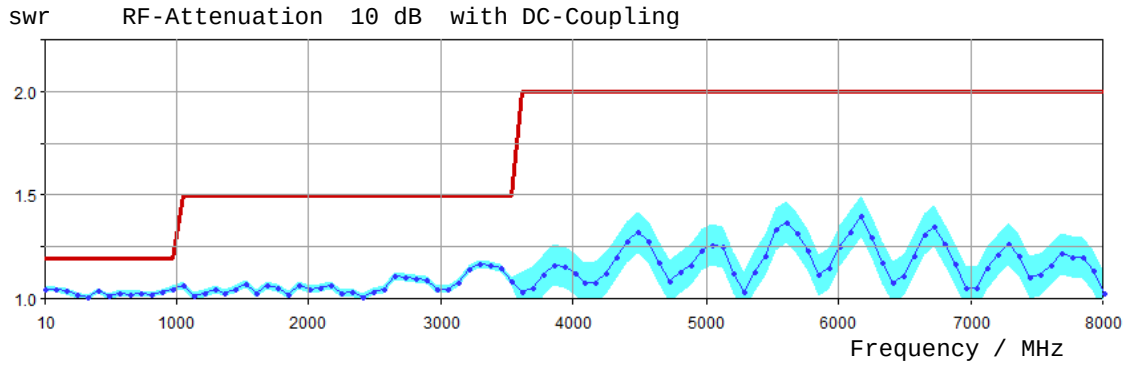
RF attenuation 0 dB, Input 1, DC coupled, preselector on, preamplifier on



RF attenuation 5 dB, Input 1, DC coupled, preselector on, preamplifier on

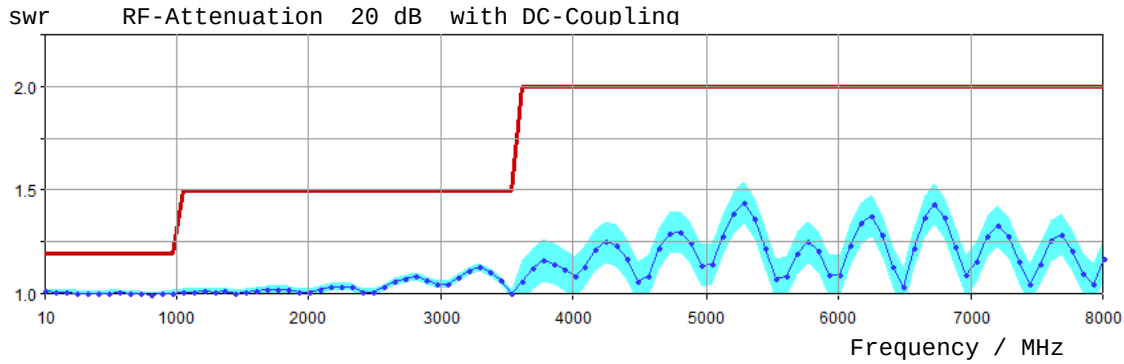


RF attenuation 10 dB, Input 1, DC coupled, preselector on, preamplifier on

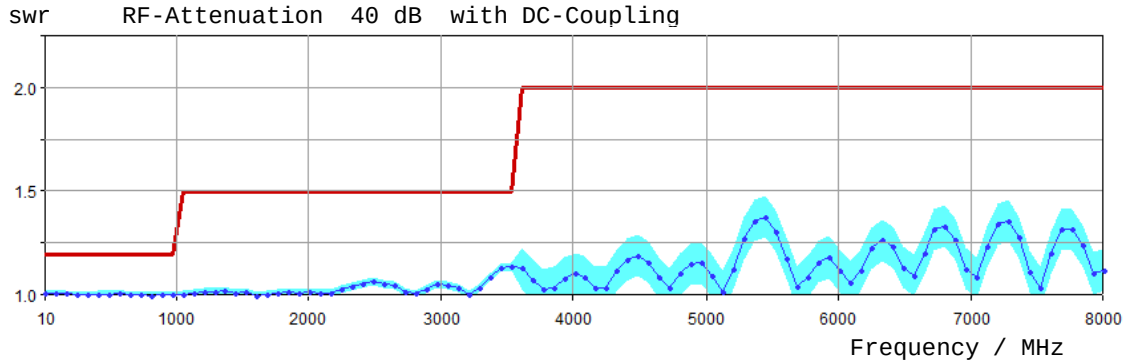


Incoming Results

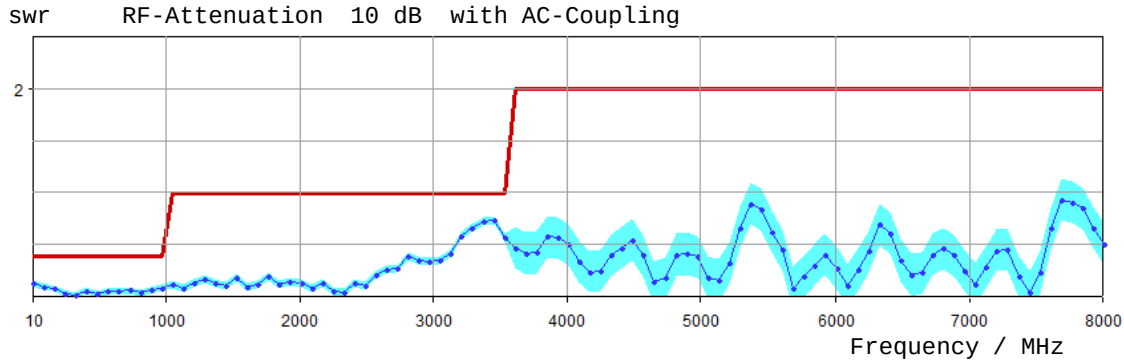
RF attenuation 20 dB, Input 1, DC coupled, preselector on, preamplifier on



RF attenuation 40 dB, Input 1, DC coupled, preselector on, preamplifier on



RF attenuation 10 dB, Input 1, AC coupled, preselector on, preamplifier on



Incoming Results

41. Return Loss at the RF Input 2

RF attenuation 0 dB, Input 2, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	2.00	1.20	0.05
1.008 MHz	2.00	1.53	0.05
2.007 MHz	2.00	1.53	0.05
3.006 MHz	2.00	1.53	0.05
4.005 MHz	2.00	1.53	0.05
5.005 MHz	2.00	1.52	0.05
6.004 MHz	2.00	1.51	0.05
7.003 MHz	2.00	1.50	0.05
8.002 MHz	2.00	1.49	0.05
9.002 MHz	2.00	1.48	0.05
10.000 MHz	2.00	1.47	0.05

RF attenuation 5 dB, Input 2, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.50	1.07	0.05
1.008 MHz	1.50	1.16	0.05
2.007 MHz	1.50	1.16	0.05
3.006 MHz	1.50	1.16	0.05
4.005 MHz	1.50	1.16	0.05
5.005 MHz	1.50	1.16	0.05
6.004 MHz	1.50	1.15	0.05
7.003 MHz	1.50	1.15	0.05
8.002 MHz	1.50	1.15	0.05
9.002 MHz	1.50	1.14	0.05
10.000 MHz	1.50	1.14	0.05

RF attenuation 10 dB, Input 2, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.03	0.05
1.008 MHz	1.20	1.06	0.05
2.007 MHz	1.20	1.06	0.05
3.006 MHz	1.20	1.06	0.05
4.005 MHz	1.20	1.06	0.05
5.005 MHz	1.20	1.06	0.05
6.004 MHz	1.20	1.06	0.05
7.003 MHz	1.20	1.06	0.05
8.002 MHz	1.20	1.06	0.05
9.002 MHz	1.20	1.05	0.05
10.000 MHz	1.20	1.05	0.05

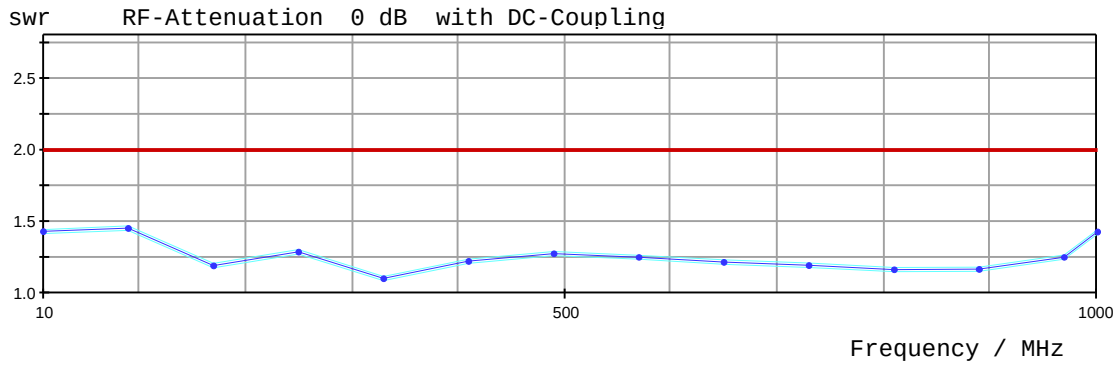
RF attenuation 20 dB, Input 2, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.02	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.02	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.02	0.05
5.005 MHz	1.20	1.02	0.05
6.004 MHz	1.20	1.02	0.05
7.003 MHz	1.20	1.02	0.05
8.002 MHz	1.20	1.02	0.05
9.002 MHz	1.20	1.02	0.05
10.000 MHz	1.20	1.02	0.05

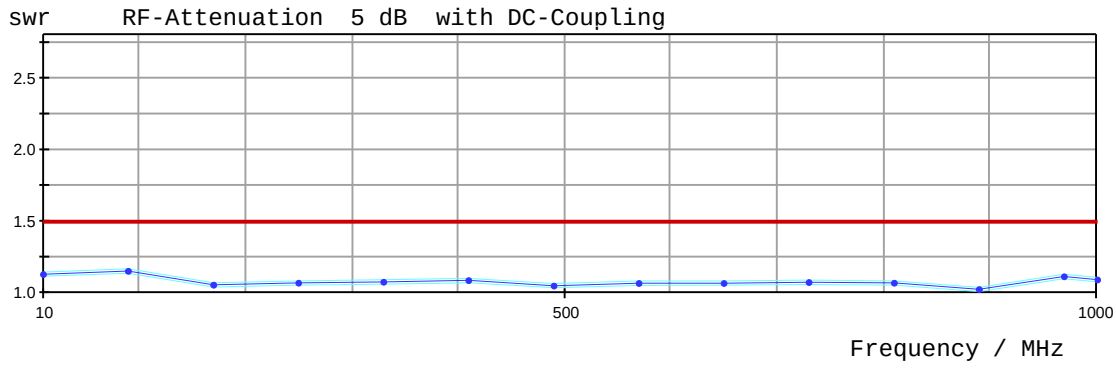
RF attenuation 40 dB, Input 2, DC coupled, preselector off, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.02	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.01	0.05
5.005 MHz	1.20	1.01	0.05
6.004 MHz	1.20	1.01	0.05
7.003 MHz	1.20	1.01	0.05
8.002 MHz	1.20	1.02	0.05
9.002 MHz	1.20	1.01	0.05
10.000 MHz	1.20	1.02	0.05

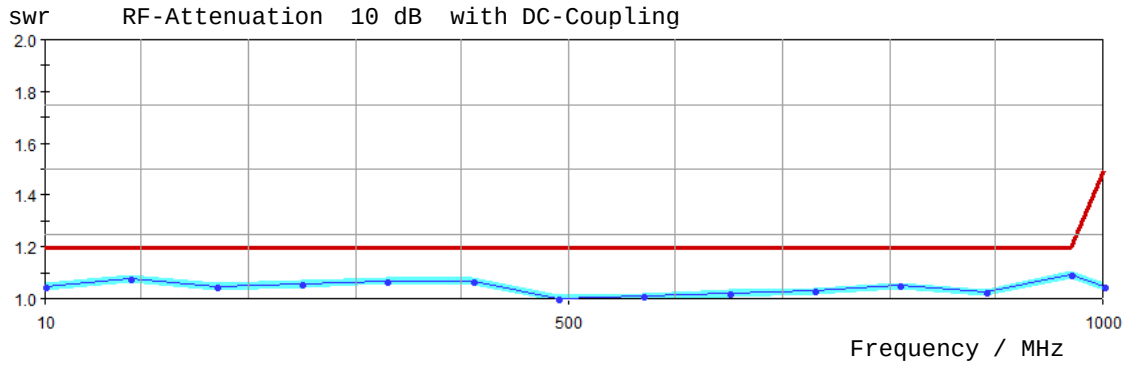
RF attenuation 0 dB, Input 2, DC coupled, preselector off, preamplifier off



RF attenuation 5 dB, Input 2, DC coupled, preselector off, preamplifier off

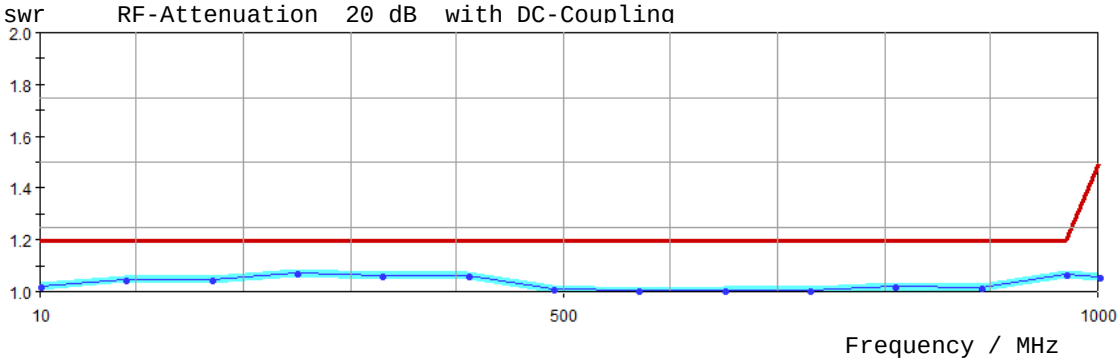


RF attenuation 10 dB, Input 2, DC coupled, preselector off, preamplifier off

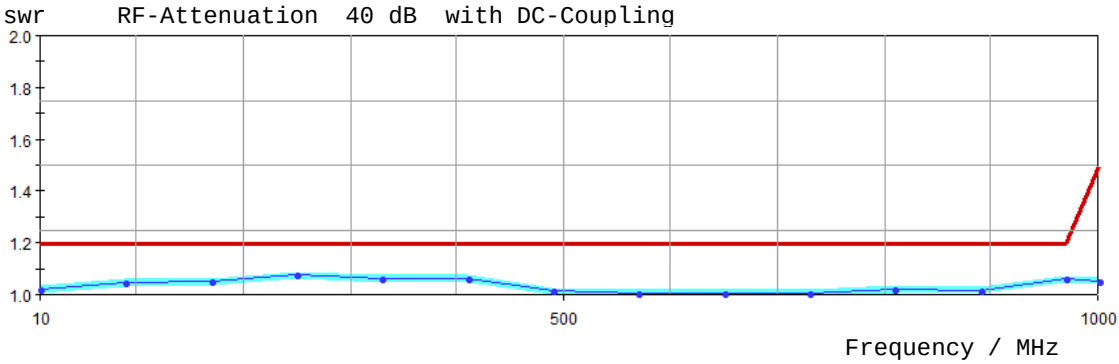


Incoming Results

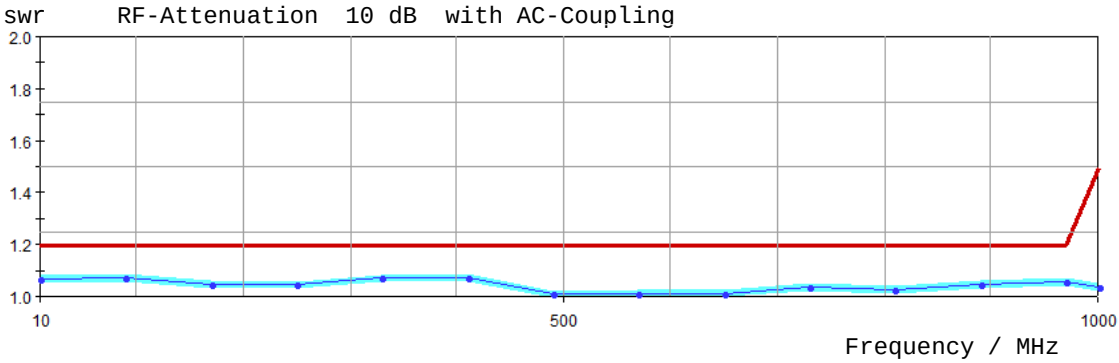
RF attenuation 20 dB, Input 2, DC coupled, preselector off, preamplifier off



RF attenuation 40 dB, Input 2, DC coupled, preselector off, preamplifier off



RF attenuation 10 dB, Input 2, AC coupled, preselector off, preamplifier off



Incoming Results

42. Return Loss at the RF Input 2 with preselector

RF attenuation 0 dB, Input 2, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	2.00	1.08	0.05
1.008 MHz	2.00	1.52	0.05
2.007 MHz	2.00	1.52	0.05
3.006 MHz	2.00	1.54	0.05
4.005 MHz	2.00	1.57	0.05
5.005 MHz	2.00	1.60	0.05
6.004 MHz	2.00	1.61	0.05
7.003 MHz	2.00	1.61	0.05
8.002 MHz	2.00	1.59	0.05
9.002 MHz	2.00	1.55	0.05
10.000 MHz	2.00	1.50	0.05

RF attenuation 5 dB, Input 2, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.50	1.03	0.05
1.008 MHz	1.50	1.14	0.05
2.007 MHz	1.50	1.13	0.05
3.006 MHz	1.50	1.14	0.05
4.005 MHz	1.50	1.15	0.05
5.005 MHz	1.50	1.16	0.05
6.004 MHz	1.50	1.17	0.05
7.003 MHz	1.50	1.17	0.05
8.002 MHz	1.50	1.17	0.05
9.002 MHz	1.50	1.16	0.05
10.000 MHz	1.50	1.15	0.05

RF attenuation 10 dB, Input 2, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.02	0.05
1.008 MHz	1.20	1.05	0.05
2.007 MHz	1.20	1.03	0.05
3.006 MHz	1.20	1.04	0.05
4.005 MHz	1.20	1.04	0.05
5.005 MHz	1.20	1.05	0.05
6.004 MHz	1.20	1.06	0.05
7.003 MHz	1.20	1.06	0.05
8.002 MHz	1.20	1.07	0.05
9.002 MHz	1.20	1.06	0.05
10.000 MHz	1.20	1.06	0.05

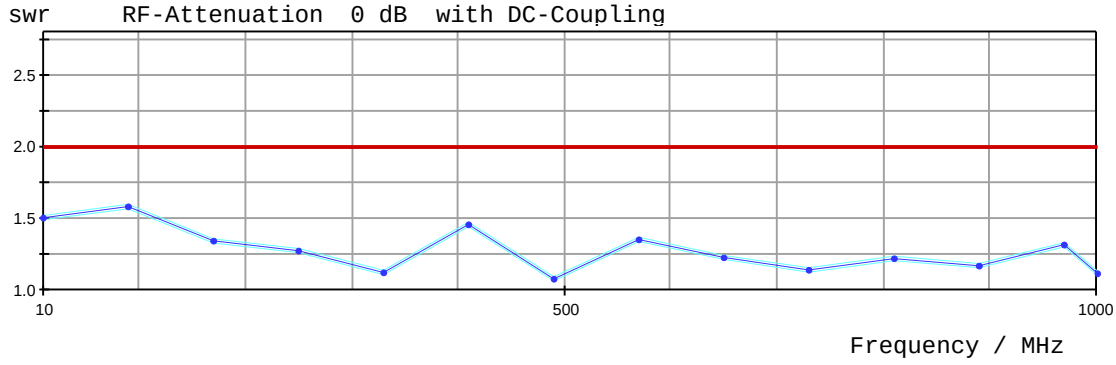
RF attenuation 20 dB, Input 2, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.02	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.02	0.05
5.005 MHz	1.20	1.01	0.05
6.004 MHz	1.20	1.02	0.05
7.003 MHz	1.20	1.02	0.05
8.002 MHz	1.20	1.02	0.05
9.002 MHz	1.20	1.02	0.05
10.000 MHz	1.20	1.02	0.05

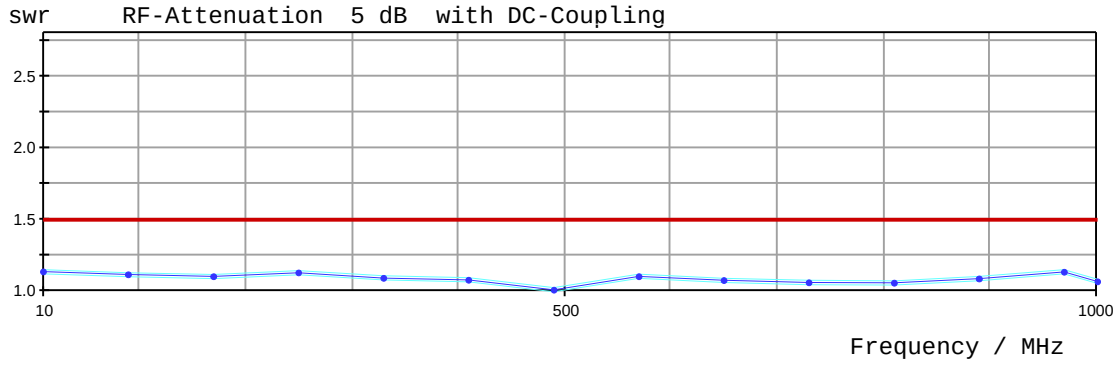
RF attenuation 40 dB, Input 2, DC coupled, preselector on, preamplifier off

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.01	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.00	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.01	0.05
5.005 MHz	1.20	1.01	0.05
6.004 MHz	1.20	1.01	0.05
7.003 MHz	1.20	1.01	0.05
8.002 MHz	1.20	1.01	0.05
9.002 MHz	1.20	1.02	0.05
10.000 MHz	1.20	1.02	0.05

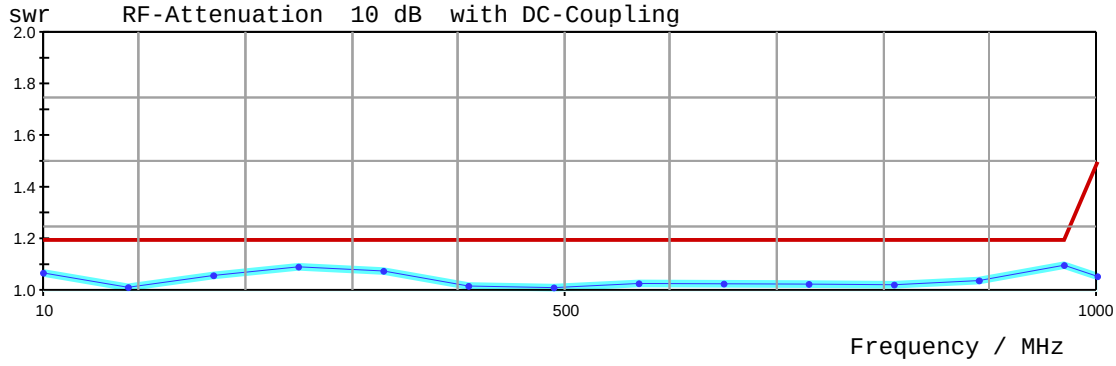
RF attenuation 0 dB, Input 2, DC coupled, preselector on, preamplifier off



RF attenuation 5 dB, Input 2, DC coupled, preselector on, preamplifier off

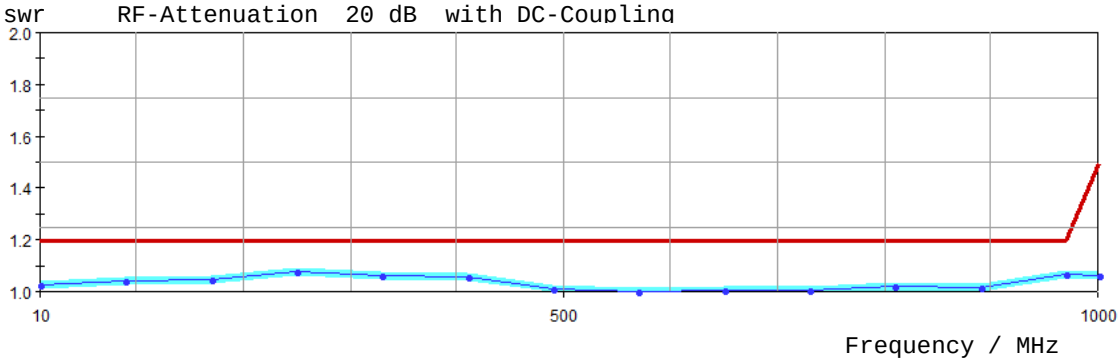


RF attenuation 10 dB, Input 2, DC coupled, preselector on, preamplifier off

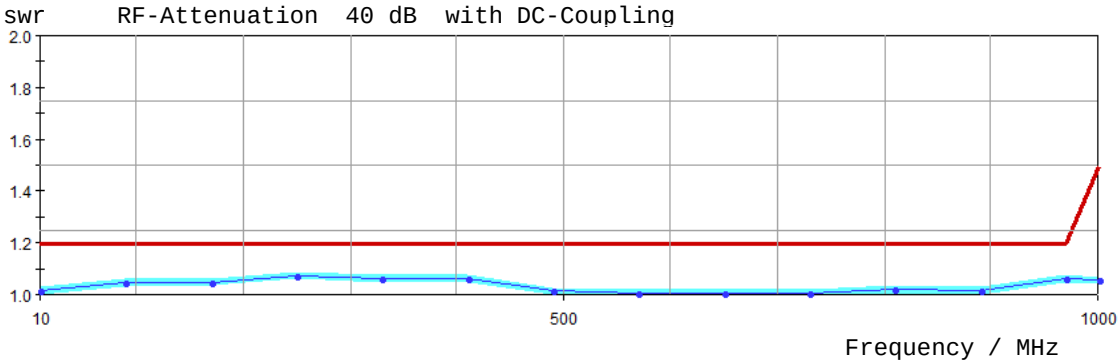


Incoming Results

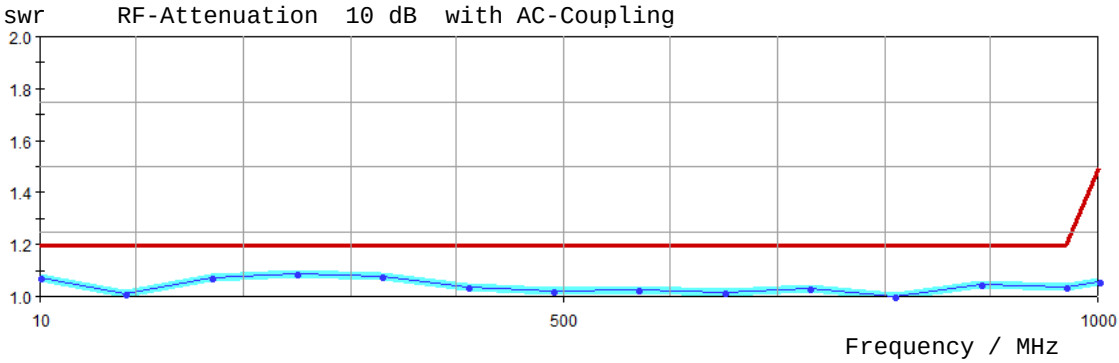
RF attenuation 20 dB, Input 2, DC coupled, preselector on, preamplifier off



RF attenuation 40 dB, Input 2, DC coupled, preselector on, preamplifier off



RF attenuation 10 dB, Input 2, AC coupled, preselector on, preamplifier off



Incoming Results

43. Return Loss at the RF Input 2 with preselector and preamplifier

RF attenuation 0 dB, Input 2, DC preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	2.00	1.08	0.05
1.008 MHz	2.00	1.52	0.05
2.007 MHz	2.00	1.52	0.05
3.006 MHz	2.00	1.54	0.05
4.005 MHz	2.00	1.57	0.05
5.005 MHz	2.00	1.60	0.05
6.004 MHz	2.00	1.61	0.05
7.003 MHz	2.00	1.61	0.05
8.002 MHz	2.00	1.59	0.05
9.002 MHz	2.00	1.55	0.05
10.000 MHz	2.00	1.50	0.05

RF attenuation 5 dB, Input 2, DC preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.50	1.04	0.05
1.008 MHz	1.50	1.14	0.05
2.007 MHz	1.50	1.13	0.05
3.006 MHz	1.50	1.14	0.05
4.005 MHz	1.50	1.15	0.05
5.005 MHz	1.50	1.16	0.05
6.004 MHz	1.50	1.17	0.05
7.003 MHz	1.50	1.17	0.05
8.002 MHz	1.50	1.17	0.05
9.002 MHz	1.50	1.16	0.05
10.000 MHz	1.50	1.15	0.05

RF attenuation 10 dB, Input 2, DC preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.02	0.05
1.008 MHz	1.20	1.05	0.05
2.007 MHz	1.20	1.03	0.05
3.006 MHz	1.20	1.04	0.05
4.005 MHz	1.20	1.04	0.05
5.005 MHz	1.20	1.05	0.05
6.004 MHz	1.20	1.06	0.05
7.003 MHz	1.20	1.06	0.05
8.002 MHz	1.20	1.07	0.05
9.002 MHz	1.20	1.06	0.05
10.000 MHz	1.20	1.06	0.05

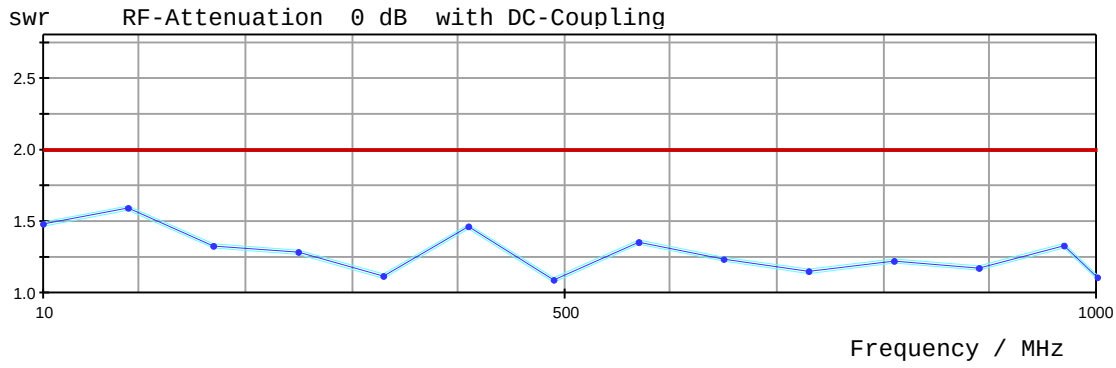
RF attenuation 20 dB, Input 2, DC preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.02	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.01	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.01	0.05
5.005 MHz	1.20	1.02	0.05
6.004 MHz	1.20	1.02	0.05
7.003 MHz	1.20	1.02	0.05
8.002 MHz	1.20	1.02	0.05
9.002 MHz	1.20	1.02	0.05
10.000 MHz	1.20	1.02	0.05

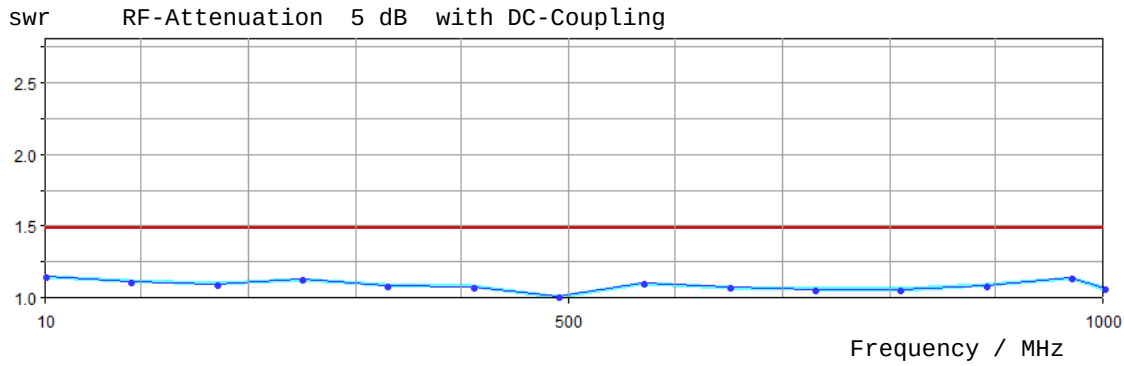
RF attenuation 40 dB, Input 2, DC preselector on, preamplifier on

frequency	DUL SWR	actual SWR	MU
0.009 MHz	1.20	1.02	0.05
1.008 MHz	1.20	1.01	0.05
2.007 MHz	1.20	1.02	0.05
3.006 MHz	1.20	1.01	0.05
4.005 MHz	1.20	1.01	0.05
5.005 MHz	1.20	1.01	0.05
6.004 MHz	1.20	1.01	0.05
7.003 MHz	1.20	1.01	0.05
8.002 MHz	1.20	1.02	0.05
9.002 MHz	1.20	1.02	0.05
10.000 MHz	1.20	1.02	0.05

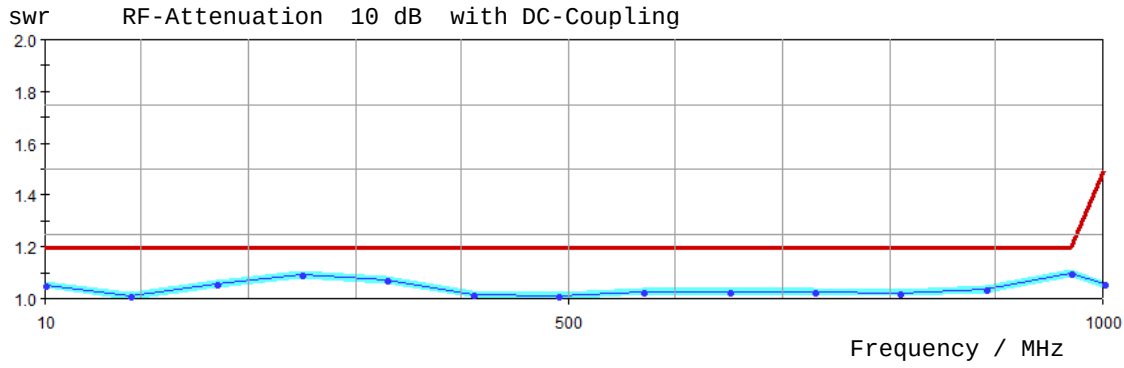
RF attenuation 0 dB, Input 2, DC preselector on, preamplifier on



RF attenuation 5dB, Input 2, DC preselector on, preamplifier on

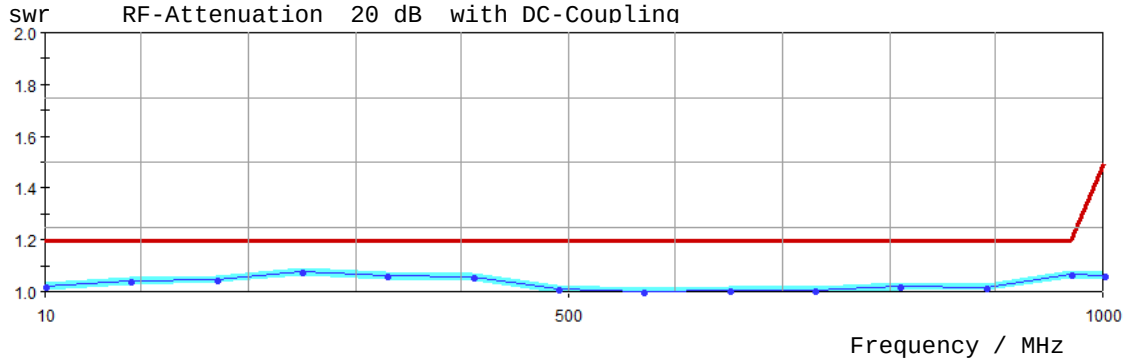


RF attenuation 10dB, Input 2, DC preselector on, preamplifier on

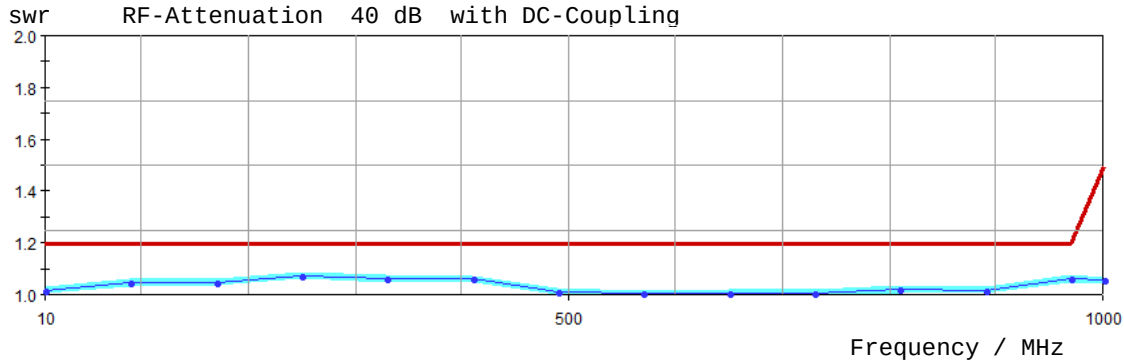


Incoming Results

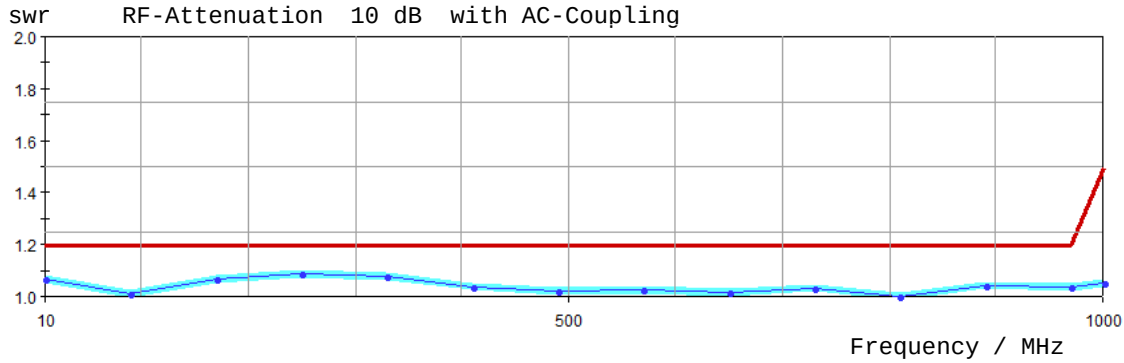
RF attenuation 20dB, Input 2, DC preselector on, preamplifier on



RF attenuation 40dB, Input 2, DC preselector on, preamplifier on



RF attenuation 10dB, Input 2, AC preselector on, preamplifier on



Incoming Results

44. Detectors according CISPR 16-1-1 Ed. 4

44.1 Sine-wave voltage accuracy

Detector	Level Nominal /dBm	DL /dB	Actual /dB	MU /dB
Band A				
Fin = 9.05 kHz				
PK+	-10.0	1.00	-0.20	0.07
QPK	-10.0	1.00	-0.20	0.07
CAV	-10.0	1.00	0.20	0.07
CRMS	-10.0	1.00	-0.21	0.07
Fin = 75.00 kHz				
PK+	-10.0	1.00	0.00	0.07
QPK	-10.0	1.00	0.00	0.07
CAV	-10.0	1.00	0.40	0.07
CRMS	-10.0	1.00	0.00	0.07
Fin = 149.95 kHz				
PK+	-10.0	1.00	0.00	0.07
QPK	-10.0	1.00	0.00	0.07
CAV	-10.0	1.00	0.40	0.07
CRMS	-10.0	1.00	0.00	0.07
Band B				
Fin = 0.15500 MHz				
PK+	-10.0	1.00	-0.01	0.07
QPK	-10.0	1.00	-0.01	0.07
CAV	-10.0	1.00	-0.21	0.07
CRMS	-10.0	1.00	-0.01	0.07
Fin = 15.00 MHz				
PK+	-10.0	1.00	0.10	0.07
QPK	-10.0	1.00	0.10	0.07
CAV	-10.0	1.00	-0.10	0.07
CRMS	-10.0	1.00	0.10	0.07
Fin = 29.99500 MHz				
PK+	-10.0	1.00	0.13	0.07
QPK	-10.0	1.00	0.13	0.07
CAV	-10.0	1.00	-0.07	0.07
CRMS	-10.0	1.00	0.13	0.07
Band C				
Fin = 30.03 MHz				
PK+	-10.0	0.80	0.15	0.07
QPK	-10.0	0.80	0.13	0.07
CAV	-10.0	0.80	0.43	0.07
CRMS	-10.0	0.80	0.13	0.07

Fin = 165.00 MHz

PK+	-10.0	0.80	0.05	0.07
QPK	-10.0	0.80	0.04	0.07
CAV	-10.0	0.80	0.34	0.07
CRMS	-10.0	0.80	0.04	0.07

Fin = 299.97 MHz

PK+	-10.0	0.80	0.12	0.07
QPK	-10.0	0.80	0.12	0.07
CAV	-10.0	0.80	0.42	0.07
CRMS	-10.0	0.80	0.12	0.07

Band D

Fin = 300.03 MHz

PK+	-10.0	0.80	0.12	0.07
QPK	-10.0	0.80	0.11	0.07
CAV	-10.0	0.80	0.42	0.07
CRMS	-10.0	0.80	0.12	0.07

Fin = 650.00 MHz

PK+	-10.0	0.80	-0.01	0.07
QPK	-10.0	0.80	-0.01	0.07
CAV	-10.0	0.80	0.29	0.07
CRMS	-10.0	0.80	-0.01	0.07

Fin = 999.97 MHz

PK+	-10.0	0.80	0.13	0.07
QPK	-10.0	0.80	0.13	0.07
CAV	-10.0	0.80	0.43	0.07
CRMS	-10.0	0.80	0.13	0.07

Band E

Fin = 1000.25 MHz

PK+	-10.0	1.80	0.12	0.07
CAV	-10.0	1.80	0.11	0.07
CRMS	-10.0	1.80	0.11	0.07

Fin = 7999.75 MHz

PK+	-10.0	1.80	0.17	0.10
CAV	-10.0	1.80	0.17	0.10
CRMS	-10.0	1.80	0.17	0.10

44.2 Response to pulses

Peak and Quasipeak detector

Amplitude relationship

Band A

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 9.05 kHz					
25	Max peak	64.6 dBuV	67.6 dBuV	65.84 dBuV	0.30 dB
25	Quasipeak	58.5 dBuV	61.5 dBuV	59.70 dBuV	0.30 dB
Fin = 75.00 kHz					
25	Max peak	64.6 dBuV	67.6 dBuV	66.08 dBuV	0.30 dB
25	Quasipeak	58.5 dBuV	61.5 dBuV	59.94 dBuV	0.30 dB
Fin = 149.95 kHz					
25	Max peak	64.6 dBuV	67.6 dBuV	66.08 dBuV	0.30 dB
25	Quasipeak	58.5 dBuV	61.5 dBuV	59.92 dBuV	0.30 dB

Band B

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 0.15500 MHz					
100	Max peak	65.1 dBuV	68.1 dBuV	66.34 dBuV	0.30 dB
100	Quasipeak	58.5 dBuV	61.5 dBuV	59.58 dBuV	0.30 dB
Fin = 15.00000 MHz					
100	Max peak	65.1 dBuV	68.1 dBuV	66.56 dBuV	0.30 dB
100	Quasipeak	58.5 dBuV	61.5 dBuV	59.76 dBuV	0.30 dB
Fin = 29.99500 MHz					
100	Max peak	65.1 dBuV	68.1 dBuV	66.52 dBuV	0.30 dB
100	Quasipeak	58.5 dBuV	61.5 dBuV	59.68 dBuV	0.30 dB

Band C

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 30.03 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.77 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.51 dBuV	0.31 dB
Fin = 165.00 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.57 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.35 dBuV	0.31 dB
Fin = 299.97 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.66 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.44 dBuV	0.31 dB

Band D

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 300.03 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.65 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.43 dBuV	0.31 dB
Fin = 650.00 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.51 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.30 dBuV	0.31 dB
Fin = 999.97 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.77 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.54 dBuV	0.31 dB

Band E

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 1000.25 MHz						
50000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.33 dBuV	0.12 dB
Fin = 7999.75 MHz						
50000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.35 dBuV	0.15 dB

Incoming Results

Quasipeak, variation with repetition frequency

Band A

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 9.05 kHz					
25	Reference			60.13 dBuV	
100		3.0 dB	5.0 dB	3.48 dB	0.05 dB
60		2.0 dB	4.0 dB	2.59 dB	0.05 dB
10		-5.0 dB	-3.0 dB	-3.97 dB	0.05 dB
5		-9.0 dB	-6.0 dB	-7.89 dB	0.05 dB
2		-15.0 dB	-11.0 dB	-13.69 dB	0.05 dB
1		-19.0 dB	-15.0 dB	-17.19 dB	0.05 dB
single		-21.0 dB	-17.0 dB	-19.09 dB	0.05 dB
Fin = 75.00 kHz					
25	Reference			60.30 dBuV	
100		3.0 dB	5.0 dB	3.68 dB	0.05 dB
60		2.0 dB	4.0 dB	2.58 dB	0.05 dB
10		-5.0 dB	-3.0 dB	-3.98 dB	0.05 dB
5		-9.0 dB	-6.0 dB	-7.90 dB	0.05 dB
2		-15.0 dB	-11.0 dB	-13.70 dB	0.05 dB
1		-19.0 dB	-15.0 dB	-17.30 dB	0.05 dB
single		-21.0 dB	-17.0 dB	-19.13 dB	0.05 dB
Fin = 149.95 kHz					
25	Reference			60.27 dBuV	
100		3.0 dB	5.0 dB	3.66 dB	0.05 dB
60		2.0 dB	4.0 dB	2.59 dB	0.05 dB
10		-5.0 dB	-3.0 dB	-3.97 dB	0.05 dB
5		-9.0 dB	-6.0 dB	-7.89 dB	0.05 dB
2		-15.0 dB	-11.0 dB	-13.70 dB	0.05 dB
1		-19.0 dB	-15.0 dB	-17.30 dB	0.05 dB
single		-21.0 dB	-17.0 dB	-19.14 dB	0.05 dB

Incoming Results

Band B

fp/Hz	Detector	DLL	DUL	actual	MU	
Fin = 0.15500 MHz						
100	Reference			60.40 dBuV		
20		-7.5 dB	-5.5 dB	-7.01 dB	0.05 dB	
10		-11.5 dB	-8.5 dB	-11.18 dB	0.05 dB	
2		-22.5 dB	-18.5 dB	-21.36 dB	0.05 dB	
1		-24.5 dB	-20.5 dB	-22.60 dB	0.05 dB	
single		-25.5 dB	-21.5 dB	-22.72 dB	0.05 dB	
Fin = 15.00000 MHz						
100	Reference			60.08 dBuV		
20		-7.5 dB	-5.5 dB	-7.00 dB	0.05 dB	
10		-11.5 dB	-8.5 dB	-11.23 dB	0.05 dB	
2		-22.5 dB	-18.5 dB	-21.67 dB	0.05 dB	
1		-24.5 dB	-20.5 dB	-22.98 dB	0.05 dB	
single		-25.5 dB	-21.5 dB	-22.94 dB	0.05 dB	
Fin = 29.99500 MHz						
100	Reference			60.60 dBuV		
20		-7.5 dB	-5.5 dB	-7.02 dB	0.05 dB	
10		-11.5 dB	-8.5 dB	-11.22 dB	0.05 dB	
2		-22.5 dB	-18.5 dB	-21.74 dB	0.05 dB	
1		-24.5 dB	-20.5 dB	-22.87 dB	0.05 dB	
single		-25.5 dB	-21.5 dB	-23.31 dB	0.05 dB	

Band C

fp/Hz	Detector	DLL	DUL	actual	MU	
Fin = 30.03 MHz						
100	Reference			49.58 dBuV		
20		-10.0 dB	-8.0 dB	-9.48 dB	0.05 dB	
10		-15.5 dB	-12.5 dB	-14.41 dB	0.05 dB	
2		-28.0 dB	-24.0 dB	-26.60 dB	0.05 dB	
1		-30.5 dB	-26.5 dB	-29.29 dB	0.05 dB	
single		-33.5 dB	-29.5 dB	-29.36 dB	0.05 dB	FAIL
Fin = 165.00 MHz						
100	Reference			50.05 dBuV		
20		-10.0 dB	-8.0 dB	-9.46 dB	0.05 dB	
10		-15.5 dB	-12.5 dB	-14.40 dB	0.05 dB	
2		-28.0 dB	-24.0 dB	-26.61 dB	0.05 dB	
1		-30.5 dB	-26.5 dB	-29.85 dB	0.05 dB	
single		-33.5 dB	-29.5 dB	-30.23 dB	0.05 dB	
Fin = 299.97 MHz						
100	Reference			49.86 dBuV		
20		-10.0 dB	-8.0 dB	-9.47 dB	0.05 dB	
10		-15.5 dB	-12.5 dB	-14.39 dB	0.05 dB	
2		-28.0 dB	-24.0 dB	-26.63 dB	0.05 dB	
1		-30.5 dB	-26.5 dB	-29.90 dB	0.05 dB	
single		-33.5 dB	-29.5 dB	-30.21 dB	0.05 dB	

Incoming Results

Band D

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 300.03 MHz					
100	Reference			49.85 dBuV	
20		-10.0 dB	-8.0 dB	-9.47 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.40 dB	0.05 dB
Fin = 650.00 MHz					
100	Reference			49.33 dBuV	
20		-10.0 dB	-8.0 dB	-9.48 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.38 dB	0.05 dB
Fin = 999.97 MHz					
100	Reference			49.98 dBuV	
20		-10.0 dB	-8.0 dB	-9.49 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.41 dB	0.05 dB

Measurement at 1 kHz pulse frequency

Band B

fp/Hz		DLL	DUL	actual	MU
Fin = 0.15500 MHz					
100	Reference			59.75 dBuV	
1000		3.5 dB	5.5 dB	4.57 dB	0.05 dB
Fin = 15.00000 MHz					
100	Reference			59.55 dBuV	
1000		3.5 dB	5.5 dB	4.63 dB	0.05 dB
Fin = 29.99500 MHz					
100	Reference			58.86 dBuV	
1000		3.5 dB	5.5 dB	4.66 dB	0.05 dB

Band C

fp/Hz		DLL	DUL	actual	MU
Fin = 30.03 MHz					
100	Reference			38.80 dBuV	
1000		7.0 dB	9.0 dB	8.52 dB	0.05 dB
Fin = 165.00 MHz					
100	Reference			38.58 dBuV	
1000		7.0 dB	9.0 dB	8.51 dB	0.05 dB
Fin = 299.97 MHz					
100	Reference			38.51 dBuV	
1000		7.0 dB	9.0 dB	8.51 dB	0.05 dB

Incoming Results

Band D

fp/Hz		DLL	DUL	actual	MU
Fin = 300.03 MHz					
100	Reference			38.48 dBuV	
1000		7.0 dB	9.0 dB	8.54 dB	0.05 dB
Fin = 650.00 MHz					
100	Reference			37.99 dBuV	
1000		7.0 dB	9.0 dB	8.57 dB	0.05 dB
Fin = 999.97 MHz					
100	Reference			38.32 dBuV	
1000		7.0 dB	9.0 dB	8.54 dB	0.05 dB

CISPR Average Detector

Amplitude relationship

Band A

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 9.05 kHz					
25	CISPR AV	46.1 dBuV	49.1 dBuV	+47.74 dBuV	0.30 dB
25	CISPR AV (Ed.3.2)	47.1 dBuV	50.1 dBuV	+47.74 dBuV	0.30 dB
Fin = 75.00 kHz					
25	CISPR AV	46.1 dBuV	49.1 dBuV	+47.93 dBuV	0.30 dB
25	CISPR AV (Ed.3.2)	47.1 dBuV	50.1 dBuV	+47.93 dBuV	0.30 dB
Fin = 149.95 kHz					
25	CISPR AV	46.1 dBuV	49.1 dBuV	+47.92 dBuV	0.30 dB
25	CISPR AV (Ed.3.2)	47.1 dBuV	50.1 dBuV	+47.92 dBuV	0.30 dB

Band B

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 0.15500 MHz					
500	CISPR AV	39.5 dBuV	42.5 dBuV	41.07 dBuV	0.30 dB
500	CISPR AV (Ed.3.2)	40.5 dBuV	43.5 dBuV	41.07 dBuV	0.30 dB
Fin = 15.00000 MHz					
500	CISPR AV	39.5 dBuV	42.5 dBuV	41.05 dBuV	0.30 dB
500	CISPR AV (Ed.3.2)	40.5 dBuV	43.5 dBuV	41.05 dBuV	0.30 dB
Fin = 29.99775 MHz					
500	CISPR AV	39.5 dBuV	42.5 dBuV	41.14 dBuV	0.30 dB
500	CISPR AV (Ed.3.2)	40.5 dBuV	43.5 dBuV	41.14 dBuV	0.30 dB

Band C

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 30.03 MHz					
5000	CISPR AV	22.5 dBuV	25.5 dBuV	24.27 dBuV	0.31 dB
5000	CISPR AV (Ed.3.2)	23.5 dBuV	26.5 dBuV	24.27 dBuV	0.31 dB

Fin = 165.00 MHz

5000	CISPR AV	22.5 dBuV	25.5 dBuV	24.37 dBuV	0.31 dB
5000	CISPR AV (Ed.3.2)	23.5 dBuV	26.5 dBuV	24.37 dBuV	0.31 dB

Fin = 299.97 MHz

5000	CISPR AV	22.5 dBuV	25.5 dBuV	24.35 dBuV	0.31 dB
5000	CISPR AV (Ed.3.2)	23.5 dBuV	26.5 dBuV	24.35 dBuV	0.31 dB

Band D

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 300.03 MHz					
5000	CISPR AV	22.5 dBuV	25.5 dBuV	24.33 dBuV	0.31 dB
5000	CISPR AV (Ed.3.2)	23.5 dBuV	26.5 dBuV	24.33 dBuV	0.31 dB
Fin = 650.00 MHz					
5000	CISPR AV	22.5 dBuV	25.5 dBuV	24.17 dBuV	0.31 dB
5000	CISPR AV (Ed.3.2)	23.5 dBuV	26.5 dBuV	24.17 dBuV	0.31 dB
Fin = 999.97 MHz					
5000	CISPR AV	22.5 dBuV	25.5 dBuV	24.39 dBuV	0.31 dB
5000	CISPR AV (Ed.3.2)	23.5 dBuV	26.5 dBuV	24.39 dBuV	0.31 dB

Band E

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 1000.25 MHz						
50000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.06 dBuV	0.12 dB
Fin = 7999.75 MHz						
50000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.10 dBuV	0.15 dB

CISPR-average, variation with repetition frequency

Band A

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 9.05 kHz					
70	Reference			56.68 dBuV	
35		-7.0 dB	-3.0 dB	-6.00 dB	0.05 dB
17.5		-13.0 dB	-9.0 dB	-11.94dB	0.05 dB
Fin = 75.00 kHz					
70	Reference			56.85 dBuV	
35		-7.0 dB	-3.0 dB	-6.00 dB	0.05 dB
17.5		-13.0 dB	-9.0 dB	-11.95dB	0.05 dB
Fin = 149.95 kHz					
70	Reference			56.82 dBuV	
35		-7.0 dB	-3.0 dB	-6.00 dB	0.05 dB
17.5		-13.0 dB	-9.0 dB	-11.95dB	0.05 dB

Incoming Results

Band B

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 0.15500 MHz					
3180	Reference			56.81 dBuV	
1590		-7.0 dB	-3.0 dB	-5.90 dB	0.05 dB
795		-13.0 dB	-9.0 dB	-11.73dB	0.05 dB
398		-19.0 dB	-15.0 dB	-17.24dB	0.05 dB
Fin = 15.00000 MHz					
3180	Reference			56.54 dBuV	
1590		-7.0 dB	-3.0 dB	-5.92 dB	0.05 dB
795		-13.0 dB	-9.0 dB	-11.80dB	0.05 dB
398		-19.0 dB	-15.0 dB	-17.43dB	0.05 dB
Fin = 29.99775 MHz					
3180	Reference			55.88 dBuV	
1590		-7.0 dB	-3.0 dB	-5.90 dB	0.05 dB
795		-13.0 dB	-9.0 dB	-11.75dB	0.05 dB
398		-19.0 dB	-15.0 dB	-17.32dB	0.05 dB

Band C

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 30.03 MHz					
42400	Reference			42.27 dBuV	
21200		-7.0 dB	-3.0 dB	-6.00 dB	0.05 dB
10600		-13.0 dB	-9.0 dB	-11.94dB	0.05 dB
5300		-19.0 dB	-15.0 dB	-17.77dB	0.05 dB
2650		-25.0 dB	-21.0 dB	-23.28dB	0.05 dB
Fin = 165.00 MHz					
42400	Reference			42.31 dBuV	
21200		-7.0 dB	-3.0 dB	-5.99 dB	0.05 dB
10600		-13.0 dB	-9.0 dB	-11.94dB	0.05 dB
5300		-19.0 dB	-15.0 dB	-17.81dB	0.05 dB
2650		-25.0 dB	-21.0 dB	-23.37dB	0.05 dB
Fin = 299.97 MHz					
42400	Reference			42.02 dBuV	
21200		-7.0 dB	-3.0 dB	-5.98 dB	0.05 dB
10600		-13.0 dB	-9.0 dB	-11.92dB	0.05 dB
5300		-19.0 dB	-15.0 dB	-17.79dB	0.05 dB
2650		-25.0 dB	-21.0 dB	-23.37dB	0.05 dB

Incoming Results

Band D

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 300.03 MHz					
42400	Reference			42.01 dBuV	
21200		-7.0 dB	-3.0 dB	-5.98 dB	0.05 dB
10600		-13.0 dB	-9.0 dB	-11.92dB	0.05 dB
5300		-19.0 dB	-15.0 dB	-17.79dB	0.05 dB
2650		-25.0 dB	-21.0 dB	-23.37dB	0.05 dB
Fin = 650.00 MHz					
42400	Reference			41.72 dBuV	
21200		-7.0 dB	-3.0 dB	-5.97 dB	0.05 dB
10600		-13.0 dB	-9.0 dB	-11.91dB	0.05 dB
5300		-19.0 dB	-15.0 dB	-17.78dB	0.05 dB
2650		-25.0 dB	-21.0 dB	-23.37dB	0.05 dB
Fin = 999.97 MHz					
42400	Reference			41.84 dBuV	
21200		-7.0 dB	-3.0 dB	-5.95 dB	0.05 dB
10600		-13.0 dB	-9.0 dB	-11.87dB	0.05 dB
5300		-19.0 dB	-15.0 dB	-17.72dB	0.05 dB
2650		-25.0 dB	-21.0 dB	-23.24dB	0.05 dB

Band E

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 1000.25 MHz						
353500	0.2	Reference			77.01 dBuV	
176750	0.2	71.01	-6.0 dB	-1.0 dB 2.0 dB	-0.01 dB	0.05 dB
17675	0.2	51.01	-26.0 dB	-1.0 dB 2.0 dB	+0.18 dB	0.05 dB
Fin = 7999.75 MHz						
353500	0.2	Reference			77.20 dBuV	
176750	0.2	71.20	-6.0 dB	-1.0 dB 2.0 dB	-0.01 dB	0.05 dB
17675	0.2	51.20	-26.0 dB	-1.0 dB 2.0 dB	+0.28 dB	0.05 dB

Note: The limits of -1,0 dB/+2,0 dB are used to comply with both CISPR 16-1-1:2014 (Ed.3.2) / CISPR 16-1-1:2015 (Ed.4) and CISPR 16-1-1:2019 (Ed.5) as the common tolerance of both requirements.

Response to intermittent disturbance

fp /Hz	width /ms	weighting /dB	DLL /dB	DUL /dB	actual /dB	MU /dB
Band A						
Fin = 9.05 kHz						
0.625	160	-9.0	-1.00	1.00	-0.32	0.05
Fin = 75.00 kHz						
0.625	160	-9.0	-1.00	1.00	-0.32	0.05
Fin = 149.95 kHz						
0.625	160	-9.0	-1.00	1.00	-0.32	0.05
Band B						
Fin = 0.15500 MHz						
0.625	160	-9.0	-1.00	1.00	0.29	0.05

Incoming Results

Fin = 15.00000 MHz
0.625 160 -9.0 -1.00 1.00 0.29 0.05

Fin = 29.99500 MHz
0.625 160 -9.0 -1.00 1.00 0.29 0.05

Band C

Fin = 30.03 MHz
0.625 100 -9.0 -1.00 1.00 -0.17 0.05

Fin = 165.00 MHz
0.625 100 -9.0 -1.00 1.00 -0.18 0.05

Fin = 299.97 MHz
0.625 100 -9.0 -1.00 1.00 -0.18 0.05

Band D

Fin = 300.03 MHz
0.625 100 -9.0 -1.00 1.00 -0.18 0.05

Fin = 650.00 MHz
0.625 100 -9.0 -1.00 1.00 -0.17 0.05

Fin = 999.97 MHz
0.625 100 -9.0 -1.00 1.00 -0.17 0.05

Band E

Fin = 1000.25 MHz
0.625 100 -9.0 -1.00 1.00 0.11 0.05

Fin = 7999.75 MHz
0.625 100 -9.0 -1.00 1.00 0.10 0.05

RMS-Average Detector

Amplitude relationship

Band A

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 9.05 kHz						
25	200	60.00	58.5 dBuV	61.5 dBuV	59.66 dBuV	0.10 dB
Fin = 75.00 kHz						
25	200	60.00	58.5 dBuV	61.5 dBuV	59.89 dBuV	0.10 dB
Fin = 149.95 kHz						
25	200	60.00	58.5 dBuV	61.5 dBuV	59.91 dBuV	0.10 dB

Incoming Results

Band B

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 0.15500 MHz						
1000	20	60.00	58.5 dBuV	61.5 dBuV	59.78 dBuV	0.10 dB
Fin = 15.00000 MHz						
1000	20	60.00	58.5 dBuV	61.5 dBuV	59.94 dBuV	0.10 dB
Fin = 29.99500 MHz						
1000	20	60.00	58.5 dBuV	61.5 dBuV	60.00 dBuV	0.10 dB

Band C

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 30.03 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	60.05 dBuV	0.10 dB
Fin = 165.00 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.95 dBuV	0.10 dB
Fin = 299.97 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	60.00 dBuV	0.10 dB

Band D

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 300.03 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.98 dBuV	0.10 dB
Fin = 650.00 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.87 dBuV	0.10 dB
Fin = 999.97 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	60.00 dBuV	0.10 dB

Band E

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 1000.25 MHz						
1000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.18 dBuV	0.12 dB
Fin = 7999.75 MHz						
1000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.32 dBuV	0.15 dB

Incoming Results

Variation with repetition frequency

Band A

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 9.05 kHz							
25	200	Reference				59.67 dBuV	
100	200	65.67	6.0 dB	-0.6 dB	0.6 dB	0.03 dB	0.05 dB
10	200	55.67	-4.0 dB	-0.4 dB	0.4 dB	0.03 dB	0.05 dB
5	200	50.67	-9.0 dB	-0.7 dB	0.7 dB	-0.36 dB	0.05 dB
Fin = 75.00 kHz							
25	200	Reference				59.89 dBuV	
100	200	65.89	6.0 dB	-0.6 dB	0.6 dB	0.06 dB	0.05 dB
10	200	55.89	-4.0 dB	-0.4 dB	0.4 dB	0.03 dB	0.05 dB
5	200	50.89	-9.0 dB	-0.7 dB	0.7 dB	-0.55 dB	0.05 dB
Fin = 149.95 kHz							
25	200	Reference				59.91 dBuV	
100	200	65.91	6.0 dB	-0.6 dB	0.6 dB	0.06 dB	0.05 dB
10	200	55.91	-4.0 dB	-0.4 dB	0.4 dB	0.02 dB	0.05 dB
5	200	50.91	-9.0 dB	-0.7 dB	0.7 dB	-0.55 dB	0.05 dB

Band B

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 0.15500 MHz							
1000	20	Reference				59.86 dBuV	
316	20	54.86	-5.0 dB	-0.5 dB	0.5 dB	-0.24 dB	0.05 dB
100	20	49.86	-10.0 dB	-1.0 dB	1.0 dB	-0.01 dB	0.05 dB
32	20	44.86	-15.0 dB	-1.5 dB	1.5 dB	-0.11 dB	0.05 dB
25	20	43.86	-16.0 dB	-1.6 dB	1.6 dB	-0.09 dB	0.05 dB
10	20	39.86	-20.0 dB	-2.0 dB	2.0 dB	-0.03 dB	0.05 dB
5	20	34.86	-25.0 dB	-2.3 dB	2.3 dB	-0.58 dB	0.05 dB
Fin = 15.00000 MHz							
1000	20	Reference				60.03 dBuV	
316	20	55.03	-5.0 dB	-0.5 dB	0.5 dB	-0.01 dB	0.05 dB
100	20	50.03	-10.0 dB	-1.0 dB	1.0 dB	-0.01 dB	0.05 dB
32	20	45.03	-15.0 dB	-1.5 dB	1.5 dB	0.02 dB	0.05 dB
25	20	44.03	-16.0 dB	-1.6 dB	1.6 dB	-0.09 dB	0.05 dB
10	20	40.03	-20.0 dB	-2.0 dB	2.0 dB	-0.04 dB	0.05 dB
5	20	35.03	-25.0 dB	-2.3 dB	2.3 dB	-0.62 dB	0.05 dB
Fin = 29.99500 MHz							
1000	20	Reference				60.09 dBuV	
316	20	55.09	-5.0 dB	-0.5 dB	0.5 dB	-0.01 dB	0.05 dB
100	20	50.09	-10.0 dB	-1.0 dB	1.0 dB	-0.01 dB	0.05 dB
32	20	45.09	-15.0 dB	-1.5 dB	1.5 dB	0.02 dB	0.05 dB
25	20	44.09	-16.0 dB	-1.6 dB	1.6 dB	-0.09 dB	0.05 dB
10	20	40.09	-20.0 dB	-2.0 dB	2.0 dB	-0.04 dB	0.05 dB
5	20	35.09	-25.0 dB	-2.3 dB	2.3 dB	-0.62 dB	0.05 dB

Incoming Results

Band C

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 30.03 MHz							
1000	2	Reference				60.05 dBuV	
10000	2	70.05	+10.0 dB	-1.0 dB	1.0 dB	0.02 dB	0.05 dB
316	2	55.05	-5.0 dB	-0.5 dB	0.5 dB	-0.03 dB	0.05 dB
100	2	50.05	-10.0 dB	-1.0 dB	1.0 dB	-0.03 dB	0.05 dB
32	2	40.05	-20.0 dB	-2.0 dB	2.0 dB	0.24 dB	0.05 dB
Fin = 165.00 MHz							
1000	2	Reference				59.94 dBuV	
10000	2	69.94	+10.0 dB	-1.0 dB	1.0 dB	0.00 dB	0.05 dB
316	2	54.94	-5.0 dB	-0.5 dB	0.5 dB	-0.02 dB	0.05 dB
100	2	49.94	-10.0 dB	-1.0 dB	1.0 dB	-0.02 dB	0.05 dB
32	2	39.94	-20.0 dB	-2.0 dB	2.0 dB	0.23 dB	0.05 dB
Fin = 299.97 MHz							
1000	2	Reference				59.98 dBuV	
10000	2	69.98	+10.0 dB	-1.0 dB	1.0 dB	0.00 dB	0.05 dB
316	2	54.98	-5.0 dB	-0.5 dB	0.5 dB	-0.03 dB	0.05 dB
100	2	49.98	-10.0 dB	-1.0 dB	1.0 dB	-0.02 dB	0.05 dB
32	2	39.98	-20.0 dB	-2.0 dB	2.0 dB	0.22 dB	0.05 dB

Band D

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 300.03 MHz							
1000	2	Reference				59.98 dBuV	
10000	2	69.98	+10.0 dB	-1.0 dB	1.0 dB	0.00 dB	0.05 dB
316	2	54.98	-5.0 dB	-0.5 dB	0.5 dB	-0.02 dB	0.05 dB
100	2	49.98	-10.0 dB	-1.0 dB	1.0 dB	-0.02 dB	0.05 dB
32	2	39.98	-20.0 dB	-2.0 dB	2.0 dB	0.27 dB	0.05 dB
Fin = 650.00 MHz							
1000	2	Reference				59.88 dBuV	
10000	2	69.88	+10.0 dB	-1.0 dB	1.0 dB	0.01 dB	0.05 dB
316	2	54.88	-5.0 dB	-0.5 dB	0.5 dB	-0.02 dB	0.05 dB
100	2	49.88	-10.0 dB	-1.0 dB	1.0 dB	-0.01 dB	0.05 dB
32	2	39.88	-20.0 dB	-2.0 dB	2.0 dB	0.23 dB	0.05 dB
Fin = 999.97 MHz							
1000	2	Reference				60.01 dBuV	
10000	2	70.01	+10.0 dB	-1.0 dB	1.0 dB	0.01 dB	0.05 dB
316	2	55.01	-5.0 dB	-0.5 dB	0.5 dB	-0.01 dB	0.05 dB
100	2	50.01	-10.0 dB	-1.0 dB	1.0 dB	0.00 dB	0.05 dB
32	2	40.01	-20.0 dB	-2.0 dB	2.0 dB	0.36 dB	0.05 dB

Incoming Results

Band E

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 1000.25 MHz							
1000	0.2	Reference				60.21 dBuV	
100000	0.2	80.21	+20.0 dB	-2.0 dB	2.0 dB	0.03 dB	0.05 dB
10000	0.2	70.21	+10.0 dB	-1.0 dB	1.0 dB	0.02 dB	0.05 dB
316	0.2	50.21	-10.0 dB	-1.0 dB	1.0 dB	0.17 dB	0.05 dB
Fin = 7999.75 MHz							
1000	0.2	Reference				60.44 dBuV	
100000	0.2	80.44	+20.0 dB	-2.0 dB	2.0 dB	0.00 dB	0.05 dB
10000	0.2	70.44	+10.0 dB	-1.0 dB	1.0 dB	0.00 dB	0.05 dB
316	0.2	50.44	-10.0 dB	-1.0 dB	1.0 dB	0.26 dB	0.05 dB

Response to intermittent disturbance

fp /Hz	width /ms	weighting /dB	DLL /dB	DUL /dB	actual /dB	MU /dB
Band A						
Fin = 9.05 kHz						
0.625	160	-7.9	-1.00	1.00	-0.05	0.05
Fin = 75.00 kHz						
0.625	160	-7.9	-1.00	1.00	-0.04	0.05
Fin = 149.95 kHz						
0.625	160	-7.9	-1.00	1.00	-0.04	0.05
Band B						
Fin = 0.15500 MHz						
0.625	160	-7.9	-1.00	1.00	-0.16	0.05
Fin = 15.00000 MHz						
0.625	160	-7.9	-1.00	1.00	-0.16	0.05
Fin = 29.99500 MHz						
0.625	160	-7.9	-1.00	1.00	-0.15	0.05
Band C						
Fin = 30.03 MHz						
0.625	100	-9.0	-1.00	1.00	-0.15	0.05
Fin = 165.00 MHz						
0.625	100	-9.0	-1.00	1.00	-0.14	0.05
Fin = 299.97 MHz						
0.625	100	-9.0	-1.00	1.00	-0.16	0.05
Band D						
Fin = 300.03 MHz						
0.625	100	-9.0	-1.00	1.00	-0.15	0.05
Fin = 650.00 MHz						
0.625	100	-9.0	-1.00	1.00	-0.15	0.05
Fin = 999.97 MHz						
0.625	100	-9.0	-1.00	1.00	-0.15	0.05

Incoming Results

Band E

Fin = 1000.25MHz
0.625 100 -9.0 -1.00 1.00 0.10 0.05

Fin = 7999.75MHz
0.625 100 -9.0 -1.00 1.00 0.10 0.05

45. Detectors according CISPR 16-1-1 Ed. 4 Time-Domain Scan (K53)

45.1 Sine-wave voltage accuracy

Detector	Level /dBm	Nominal	DL /dB	Actual /dB	MU /dB
Band A					
Fin = 9.05 kHz					
PK+	-10.0		1.00	-0.21	0.07
QPK	-10.0		1.00	-0.22	0.07
CAV	-10.0		1.00	0.19	0.07
CRMS	-10.0		1.00	-0.21	0.07
Fin = 75.00 kHz					
PK+	-10.0		1.00	-0.01	0.07
QPK	-10.0		1.00	-0.01	0.07
CAV	-10.0		1.00	0.39	0.07
CRMS	-10.0		1.00	-0.01	0.07
Fin = 149.95 kHz					
PK+	-10.0		1.00	-0.01	0.07
QPK	-10.0		1.00	-0.01	0.07
CAV	-10.0		1.00	0.39	0.07
CRMS	-10.0		1.00	-0.01	0.07
Band B					
Fin = 0.15500 MHz					
PK+	-10.0		1.00	-0.03	0.07
QPK	-10.0		1.00	-0.03	0.07
CAV	-10.0		1.00	-0.23	0.07
CRMS	-10.0		1.00	-0.03	0.07
Fin = 15.00000MHz					
PK+	-10.0		1.00	0.10	0.07
QPK	-10.0		1.00	0.09	0.07
CAV	-10.0		1.00	-0.11	0.07
CRMS	-10.0		1.00	0.09	0.07
Fin = 29.99500MHz					
PK+	-10.0		1.00	0.12	0.07
QPK	-10.0		1.00	0.11	0.07
CAV	-10.0		1.00	-0.09	0.07
CRMS	-10.0		1.00	0.11	0.07

Band C

Fin = 30.03 MHz

PK+	-10.0	0.80	-0.02	0.07
QPK	-10.0	0.80	-0.05	0.07
CAV	-10.0	0.80	0.25	0.07
CRMS	-10.0	0.80	-0.06	0.07

Fin = 165.00 MHz

PK+	-10.0	0.80	0.26	0.07
QPK	-10.0	0.80	0.04	0.07
CAV	-10.0	0.80	0.34	0.07
CRMS	-10.0	0.80	0.03	0.07

Fin = 299.97 MHz

PK+	-10.0	0.80	0.43	0.07
QPK	-10.0	0.80	0.22	0.07
CAV	-10.0	0.80	0.52	0.07
CRMS	-10.0	0.80	0.22	0.07

Band D

Fin = 300.03 MHz

PK+	-10.0	0.80	0.30	0.07
QPK	-10.0	0.80	0.29	0.07
CAV	-10.0	0.80	0.59	0.07
CRMS	-10.0	0.80	0.29	0.07

Fin = 650.00 MHz

PK+	-10.0	0.80	0.13	0.07
QPK	-10.0	0.80	0.13	0.07
CAV	-10.0	0.80	0.43	0.07
CRMS	-10.0	0.80	0.13	0.07

Fin = 999.97 MHz

PK+	-10.0	0.80	0.20	0.07
QPK	-10.0	0.80	0.19	0.07
CAV	-10.0	0.80	0.49	0.07
CRMS	-10.0	0.80	0.19	0.07

Band E

Fin = 1000.25 MHz

PK+	-10.0	1.80	0.13	0.07
CAV	-10.0	1.80	0.11	0.07
CRMS	-10.0	1.80	0.11	0.07

Fin = 7999.75 MHz

PK+	-10.0	1.80	0.18	0.10
CAV	-10.0	1.80	0.16	0.10
CRMS	-10.0	1.80	0.16	0.10

45.2 Response to pulses

Peak and Quasipeak detector

Amplitude relationship

Band A

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 9.05 kHz					
25	Max peak	64.6 dBuV	67.6 dBuV	65.81 dBuV	0.30 dB
25	Quasipeak	58.5 dBuV	61.5 dBuV	59.59 dBuV	0.30 dB
Fin = 75.00 kHz					
25	Max peak	64.6 dBuV	67.6 dBuV	65.93 dBuV	0.30 dB
25	Quasipeak	58.5 dBuV	61.5 dBuV	59.98 dBuV	0.30 dB
Fin = 149.95 kHz					
25	Max peak	64.6 dBuV	67.6 dBuV	65.97 dBuV	0.30 dB
25	Quasipeak	58.5 dBuV	61.5 dBuV	59.95 dBuV	0.30 dB

Band B

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 0.15500 MHz					
100	Max peak	65.1 dBuV	68.1 dBuV	66.33 dBuV	0.30 dB
100	Quasipeak	58.5 dBuV	61.5 dBuV	59.96 dBuV	0.30 dB
Fin = 15.00000MHz					
100	Max peak	65.1 dBuV	68.1 dBuV	66.57 dBuV	0.30 dB
100	Quasipeak	58.5 dBuV	61.5 dBuV	60.13 dBuV	0.30 dB
Fin = 29.99500MHz					
100	Max peak	65.1 dBuV	68.1 dBuV	66.53 dBuV	0.30 dB
100	Quasipeak	58.5 dBuV	61.5 dBuV	60.09 dBuV	0.30 dB

Band C

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 30.03 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.50 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.26 dBuV	0.31 dB
Fin = 165.00 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.60 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.37 dBuV	0.31 dB
Fin = 299.97 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.64 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.43 dBuV	0.31 dB

Band D

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 300.03 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.88 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.86 dBuV	0.31 dB
Fin = 650.00 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.59 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.55 dBuV	0.31 dB
Fin = 999.97 MHz					
100	Max peak	60.5 dBuV	63.5 dBuV	61.84 dBuV	0.31 dB
100	Quasipeak	48.5 dBuV	51.5 dBuV	49.90 dBuV	0.31 dB

Band E

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 1000.25 MHz						
50000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.50 dBuV	0.12 dB
Fin = 7999.75 MHz						
50000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.47 dBuV	0.15 dB

Quasipeak, variation with repetition frequency

Band A

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 9.05 kHz					
25	Reference			60.19 dBuV	
100		3.0 dB	5.0 dB	3.47 dB	0.05 dB
60		2.0 dB	4.0 dB	2.51 dB	0.05 dB
10		-5.0 dB	-3.0 dB	-4.14 dB	0.05 dB
5		-9.0 dB	-6.0 dB	-7.98 dB	0.05 dB
2		-15.0 dB	-11.0 dB	-13.78 dB	0.05 dB
1		-19.0 dB	-15.0 dB	-17.38 dB	0.05 dB
single		-21.0 dB	-17.0 dB	-19.17 dB	0.05 dB
Fin = 75.00 kHz					
25	Reference			60.32 dBuV	
100		3.0 dB	5.0 dB	3.56 dB	0.05 dB
60		2.0 dB	4.0 dB	2.54 dB	0.05 dB
10		-5.0 dB	-3.0 dB	-4.08 dB	0.05 dB
5		-9.0 dB	-6.0 dB	-7.94 dB	0.05 dB
2		-15.0 dB	-11.0 dB	-13.77 dB	0.05 dB
1		-19.0 dB	-15.0 dB	-17.37 dB	0.05 dB
single		-21.0 dB	-17.0 dB	-19.19 dB	0.05 dB
Fin = 149.95 kHz					
25	Reference			60.30 dBuV	
100		3.0 dB	5.0 dB	3.65 dB	0.05 dB
60		2.0 dB	4.0 dB	2.54 dB	0.05 dB
10		-5.0 dB	-3.0 dB	-3.98 dB	0.05 dB
5		-9.0 dB	-6.0 dB	-7.97 dB	0.05 dB
2		-15.0 dB	-11.0 dB	-13.80 dB	0.05 dB
1		-19.0 dB	-15.0 dB	-17.57 dB	0.05 dB
single		-21.0 dB	-17.0 dB	-19.19 dB	0.05 dB

Band B

fp/Hz	Detector	DLL	DUL	actual	MU	
Fin = 0.15500 MHz						
100	Reference			60.76 dBuV		
20		-7.5 dB	-5.5 dB	-6.98 dB	0.05 dB	
10		-11.5 dB	-8.5 dB	-11.13 dB	0.05 dB	
2		-22.5 dB	-18.5 dB	-21.47 dB	0.05 dB	
1		-24.5 dB	-20.5 dB	-22.72 dB	0.05 dB	
single		-25.5 dB	-21.5 dB	-22.67 dB	0.05 dB	
Fin = 15.00000 MHz						
100	Reference			60.45 dBuV		
20		-7.5 dB	-5.5 dB	-7.01 dB	0.05 dB	
10		-11.5 dB	-8.5 dB	-11.21 dB	0.05 dB	
2		-22.5 dB	-18.5 dB	-21.50 dB	0.05 dB	
1		-24.5 dB	-20.5 dB	-23.07 dB	0.05 dB	
single		-25.5 dB	-21.5 dB	-23.02 dB	0.05 dB	
Fin = 29.99500 MHz						
100	Reference			60.97 dBuV		
20		-7.5 dB	-5.5 dB	-7.05 dB	0.05 dB	
10		-11.5 dB	-8.5 dB	-11.25 dB	0.05 dB	
2		-22.5 dB	-18.5 dB	-21.66 dB	0.05 dB	
1		-24.5 dB	-20.5 dB	-23.11 dB	0.05 dB	
single		-25.5 dB	-21.5 dB	-22.89 dB	0.05 dB	

Band C

fp/Hz	Detector	DLL	DUL	actual	MU	
Fin = 30.03 MHz						
100	Reference			49.36 dBuV		
20		-10.0 dB	-8.0 dB	-9.72 dB	0.05 dB	
10		-15.5 dB	-12.5 dB	-14.66 dB	0.05 dB	
2		-28.0 dB	-24.0 dB	-26.89 dB	0.05 dB	
1		-30.5 dB	-26.5 dB	-29.52 dB	0.05 dB	
single		-33.5 dB	-29.5 dB	-29.40 dB	0.05 dB	FAIL
Fin = 165.00 MHz						
100	Reference			50.06 dBuV		
20		-10.0 dB	-8.0 dB	-9.75 dB	0.05 dB	
10		-15.5 dB	-12.5 dB	-14.71 dB	0.05 dB	
2		-28.0 dB	-24.0 dB	-26.63 dB	0.05 dB	
1		-30.5 dB	-26.5 dB	-29.65 dB	0.05 dB	
single		-33.5 dB	-29.5 dB	-30.03 dB	0.05 dB	
Fin = 299.97 MHz						
100	Reference			49.77 dBuV		
20		-10.0 dB	-8.0 dB	-9.66 dB	0.05 dB	
10		-15.5 dB	-12.5 dB	-14.61 dB	0.05 dB	
2		-28.0 dB	-24.0 dB	-26.68 dB	0.05 dB	
1		-30.5 dB	-26.5 dB	-29.66 dB	0.05 dB	
single		-33.5 dB	-29.5 dB	-30.06 dB	0.05 dB	

Incoming Results

Band D

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 300.03 MHz					
100	Reference			50.47 dBuV	
20		-10.0 dB	-8.0 dB	-9.58 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.53 dB	0.05 dB
Fin = 650.00 MHz					
100	Reference			49.98 dBuV	
20		-10.0 dB	-8.0 dB	-9.78 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.59 dB	0.05 dB
Fin = 999.97 MHz					
100	Reference			50.68 dBuV	
20		-10.0 dB	-8.0 dB	-9.70 dB	0.05 dB
10		-15.5 dB	-12.5 dB	-14.63 dB	0.05 dB

Measurement at 1 kHz pulse frequency

Band B

fp/Hz		DLL	DUL	actual	MU
Fin = 0.15500 MHz					
100	Reference			60.12 dBuV	
1000		3.5 dB	5.5 dB	4.37 dB	0.05 dB
Fin = 15.00000 MHz					
100	Reference			59.96 dBuV	
1000		3.5 dB	5.5 dB	4.52 dB	0.05 dB
Fin = 29.99500 MHz					
100	Reference			59.20 dBuV	
1000		3.5 dB	5.5 dB	4.58 dB	0.05 dB

Band C

fp/Hz		DLL	DUL	actual	MU
Fin = 30.03 MHz					
100	Reference			38.66 dBuV	
1000		7.0 dB	9.0 dB	8.59 dB	0.05 dB
Fin = 165.00 MHz					
100	Reference			38.65 dBuV	
1000		7.0 dB	9.0 dB	8.62 dB	0.05 dB
Fin = 299.97 MHz					
100	Reference			38.48 dBuV	
1000		7.0 dB	9.0 dB	8.68 dB	0.05 dB

Band D

fp/Hz		DLL	DUL	actual	MU
Fin = 300.03 MHz					
100	Reference			39.08 dBuV	
1000		7.0 dB	9.0 dB	8.52 dB	0.05 dB
Fin = 650.00 MHz					
100	Reference			38.38 dBuV	
1000		7.0 dB	9.0 dB	8.53 dB	0.05 dB
Fin = 999.97 MHz					
100	Reference			38.70 dBuV	
1000		7.0 dB	9.0 dB	8.50 dB	0.05 dB

CISPR Average Detector

Amplitude relationship

Band A

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 9.05 kHz					
25	CISPR AV	46.1 dBuV	49.1 dBuV	+47.71 dBuV	0.30 dB
25	CISPR AV (Ed.3.2)	47.1 dBuV	50.1 dBuV	+47.71 dBuV	0.30 dB
Fin = 75.00 kHz					
25	CISPR AV	46.1 dBuV	49.1 dBuV	+47.91 dBuV	0.30 dB
25	CISPR AV (Ed.3.2)	47.1 dBuV	50.1 dBuV	+47.91 dBuV	0.30 dB
Fin = 149.95 kHz					
25	CISPR AV	46.1 dBuV	49.1 dBuV	+47.90 dBuV	0.30 dB
25	CISPR AV (Ed.3.2)	47.1 dBuV	50.1 dBuV	+47.90 dBuV	0.30 dB

Band B

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 0.15500 MHz					
500	CISPR AV	39.5 dBuV	42.5 dBuV	41.11 dBuV	0.30 dB
500	CISPR AV (Ed.3.2)	40.5 dBuV	43.5 dBuV	41.11 dBuV	0.30 dB
Fin = 15.00000 MHz					
500	CISPR AV	39.5 dBuV	42.5 dBuV	41.14 dBuV	0.30 dB
500	CISPR AV (Ed.3.2)	40.5 dBuV	43.5 dBuV	41.14 dBuV	0.30 dB
Fin = 29.99775 MHz					
500	CISPR AV	39.5 dBuV	42.5 dBuV	41.24 dBuV	0.30 dB
500	CISPR AV (Ed.3.2)	40.5 dBuV	43.5 dBuV	41.24 dBuV	0.30 dB

Band C

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 30.03 MHz					
5000	CISPR AV	22.5 dBuV	25.5 dBuV	24.01 dBuV	0.31 dB
5000	CISPR AV (Ed.3.2)	23.5 dBuV	26.5 dBuV	24.01 dBuV	0.31 dB

Incoming Results

Fin = 165.00 MHz

5000	CISPR AV	22.5 dBuV	25.5 dBuV	24.39 dBuV	0.31 dB
5000	CISPR AV (Ed.3.2)	23.5 dBuV	26.5 dBuV	24.39 dBuV	0.31 dB

Fin = 299.97 MHz

5000	CISPR AV	22.5 dBuV	25.5 dBuV	24.33 dBuV	0.31 dB
5000	CISPR AV (Ed.3.2)	23.5 dBuV	26.5 dBuV	24.33 dBuV	0.31 dB

Band D

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 300.03 MHz					
5000	CISPR AV	22.5 dBuV	25.5 dBuV	24.49 dBuV	0.31 dB
5000	CISPR AV (Ed.3.2)	23.5 dBuV	26.5 dBuV	24.49 dBuV	0.31 dB
Fin = 650.00 MHz					
5000	CISPR AV	22.5 dBuV	25.5 dBuV	24.15 dBuV	0.31 dB
5000	CISPR AV (Ed.3.2)	23.5 dBuV	26.5 dBuV	24.15 dBuV	0.31 dB
Fin = 999.97 MHz					
5000	CISPR AV	22.5 dBuV	25.5 dBuV	24.35 dBuV	0.31 dB
5000	CISPR AV (Ed.3.2)	23.5 dBuV	26.5 dBuV	24.35 dBuV	0.31 dB

Band E

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 1000.25 MHz						
50000	0.2	60.00	58.5 dBuV	61.5 dBuV	59.99 dBuV	0.12 dB
Fin = 7999.75 MHz						
50000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.08 dBuV	0.15 dB

CISPR-average, variation with repetition frequency

Band A

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 9.05 kHz					
70	Reference			56.65 dBuV	
35		-7.0 dB	-3.0 dB	-5.99 dB	0.05 dB
17.5		-13.0 dB	-9.0 dB	-11.94dB	0.05 dB
Fin = 75.00 kHz					
70	Reference			56.82 dBuV	
35		-7.0 dB	-3.0 dB	-5.99 dB	0.05 dB
17.5		-13.0 dB	-9.0 dB	-11.95dB	0.05 dB
Fin = 149.95 kHz					
70	Reference			56.80 dBuV	
35		-7.0 dB	-3.0 dB	-6.00 dB	0.05 dB
17.5		-13.0 dB	-9.0 dB	-11.95dB	0.05 dB

Incoming Results

Band B

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 0.15500 MHz					
3180	Reference			56.79 dBuV	
1590		-7.0 dB	-3.0 dB	-5.89 dB	0.05 dB
795		-13.0 dB	-9.0 dB	-11.71dB	0.05 dB
398		-19.0 dB	-15.0 dB	-17.22dB	0.05 dB
Fin = 15.00000 MHz					
3180	Reference			56.52 dBuV	
1590		-7.0 dB	-3.0 dB	-5.90 dB	0.05 dB
795		-13.0 dB	-9.0 dB	-11.75dB	0.05 dB
398		-19.0 dB	-15.0 dB	-17.33dB	0.05 dB
Fin = 29.99775 MHz					
3180	Reference			55.86 dBuV	
1590		-7.0 dB	-3.0 dB	-5.89 dB	0.05 dB
795		-13.0 dB	-9.0 dB	-11.71dB	0.05 dB
398		-19.0 dB	-15.0 dB	-17.18dB	0.05 dB

Band C

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 30.03 MHz					
42400	Reference			42.20 dBuV	
21200		-7.0 dB	-3.0 dB	-5.96 dB	0.05 dB
10600		-13.0 dB	-9.0 dB	-11.84dB	0.05 dB
5300		-19.0 dB	-15.0 dB	-17.56dB	0.05 dB
2650		-25.0 dB	-21.0 dB	-22.87dB	0.05 dB
Fin = 165.00 MHz					
42400	Reference			42.30 dBuV	
21200		-7.0 dB	-3.0 dB	-5.96 dB	0.05 dB
10600		-13.0 dB	-9.0 dB	-11.84dB	0.05 dB
5300		-19.0 dB	-15.0 dB	-17.60dB	0.05 dB
2650		-25.0 dB	-21.0 dB	-22.95dB	0.05 dB
Fin = 299.97 MHz					
42400	Reference			42.13 dBuV	
21200		-7.0 dB	-3.0 dB	-5.95 dB	0.05 dB
10600		-13.0 dB	-9.0 dB	-11.84dB	0.05 dB
5300		-19.0 dB	-15.0 dB	-17.60dB	0.05 dB
2650		-25.0 dB	-21.0 dB	-22.98dB	0.05 dB

Incoming Results

Band D

fp/Hz	Detector	DLL	DUL	actual	MU
Fin = 300.03 MHz					
42400	Reference			42.33 dBuV	
21200		-7.0 dB	-3.0 dB	-5.95 dB	0.05 dB
10600		-13.0 dB	-9.0 dB	-11.85dB	0.05 dB
5300		-19.0 dB	-15.0 dB	-17.62dB	0.05 dB
2650		-25.0 dB	-21.0 dB	-23.03dB	0.05 dB
Fin = 650.00 MHz					
42400	Reference			41.67 dBuV	
21200		-7.0 dB	-3.0 dB	-5.94 dB	0.05 dB
10600		-13.0 dB	-9.0 dB	-11.83dB	0.05 dB
5300		-19.0 dB	-15.0 dB	-17.60dB	0.05 dB
2650		-25.0 dB	-21.0 dB	-23.00dB	0.05 dB
Fin = 999.97 MHz					
42400	Reference			41.94 dBuV	
21200		-7.0 dB	-3.0 dB	-5.94 dB	0.05 dB
10600		-13.0 dB	-9.0 dB	-11.82dB	0.05 dB
5300		-19.0 dB	-15.0 dB	-17.57dB	0.05 dB
2650		-25.0 dB	-21.0 dB	-22.96dB	0.05 dB

Band E

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 1000.25 MHz						
353500	0.2	Reference			76.99 dBuV	
176750	0.2	70.99	-6.0 dB	-1.0 dB	2.0 dB	+0.00 dB	0.05 dB
17675	0.2	50.99	-26.0 dB	-1.0 dB	2.0 dB	+0.31 dB	0.05 dB
Fin = 7999.75 MHz						
353500	0.2	Reference			77.13 dBuV	
176750	0.2	71.13	-6.0 dB	-1.0 dB	2.0 dB	-0.01 dB	0.05 dB
17675	0.2	51.13	-26.0 dB	-1.0 dB	2.0 dB	+0.29 dB	0.05 dB

Note: The limits of -1,0 dB/+2,0 dB are used to comply with both CISPR 16-1-1:2014 (Ed.3.2) / CISPR 16-1-1:2015 (Ed.4) and CISPR 16-1-1:2019 (Ed.5) as the common tolerance of both requirements.

Response to intermittent disturbance

fp /Hz	width /ms	weighting /dB	DLL /dB	DUL /dB	actual /dB	MU /dB
Band A						
Fin = 9.05 kHz						
0.625	160	-9.0	-1.00	1.00	-0.36	0.05
Fin = 75.00 kHz						
0.625	160	-9.0	-1.00	1.00	-0.36	0.05
Fin = 149.95 kHz						
0.625	160	-9.0	-1.00	1.00	-0.36	0.05

Incoming Results

Band B

Fin = 0.15500 MHz						
0.625	160	-9.0	-1.00	1.00	0.24	0.05
Fin = 15.00000 MHz						
0.625	160	-9.0	-1.00	1.00	0.25	0.05
Fin = 29.99500 MHz						
0.625	160	-9.0	-1.00	1.00	0.25	0.05

Band C

Fin = 30.03 MHz						
0.625	100	-9.0	-1.00	1.00	-0.24	0.05
Fin = 165.00 MHz						
0.625	100	-9.0	-1.00	1.00	-0.24	0.05
Fin = 299.97 MHz						
0.625	100	-9.0	-1.00	1.00	-0.24	0.05

Band D

Fin = 300.03 MHz						
0.625	100	-9.0	-1.00	1.00	-0.23	0.05
Fin = 650.00 MHz						
0.625	100	-9.0	-1.00	1.00	-0.23	0.05
Fin = 999.97 MHz						
0.625	100	-9.0	-1.00	1.00	-0.23	0.05

Band E

Fin = 1000.25 MHz						
0.625	100	-9.0	-1.00	1.00	0.06	0.05
Fin = 7999.75 MHz						
0.625	100	-9.0	-1.00	1.00	0.06	0.05

Incoming Results

RMS-Average Detector

Amplitude relationship

Band A

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 9.05 kHz						
25	200	60.00	58.5 dBuV	61.5 dBuV	59.61 dBuV	0.10 dB
Fin = 75.00 kHz						
25	200	60.00	58.5 dBuV	61.5 dBuV	59.85 dBuV	0.10 dB
Fin = 149.95 kHz						
25	200	60.00	58.5 dBuV	61.5 dBuV	59.87 dBuV	0.10 dB

Band B

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 0.15500 MHz						
1000	20	60.00	58.5 dBuV	61.5 dBuV	59.82 dBuV	0.10 dB
Fin = 15.00000 MHz						
1000	20	60.00	58.5 dBuV	61.5 dBuV	59.99 dBuV	0.10 dB
Fin = 29.99500 MHz						
1000	20	60.00	58.5 dBuV	61.5 dBuV	60.05 dBuV	0.10 dB

Band C

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 30.03 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.78 dBuV	0.10 dB
Fin = 165.00 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.92 dBuV	0.10 dB
Fin = 299.97 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.92 dBuV	0.10 dB

Incoming Results

Band D

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 300.03 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	60.13 dBuV	0.10 dB
Fin = 650.00 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.83 dBuV	0.10 dB
Fin = 999.97 MHz						
1000	2	60.00	58.5 dBuV	61.5 dBuV	59.96 dBuV	0.10 dB

Band E

fp /Hz	width /us	level /dBuV	DLL	DUL	actual	MU
Fin = 1000.25 MHz						
1000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.20 dBuV	0.12 dB
Fin = 7999.75 MHz						
1000	0.2	60.00	58.5 dBuV	61.5 dBuV	60.32 dBuV	0.15 dB

Variation with repetition frequency

Band A

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 9.05 kHz							
25	200	Reference				59.63 dBuV	
100	200	65.63	6.0 dB	-0.6 dB	0.6 dB	0.01 dB	0.05 dB
10	200	55.63	-4.0 dB	-0.4 dB	0.4 dB	0.06 dB	0.05 dB
5	200	50.63	-9.0 dB	-0.7 dB	0.7 dB	-0.21 dB	0.05 dB
Fin = 75.00 kHz							
25	200	Reference				59.84 dBuV	
100	200	65.84	6.0 dB	-0.6 dB	0.6 dB	0.07 dB	0.05 dB
10	200	55.84	-4.0 dB	-0.4 dB	0.4 dB	0.06 dB	0.05 dB
5	200	50.84	-9.0 dB	-0.7 dB	0.7 dB	-0.39 dB	0.05 dB
Fin = 149.95 kHz							
25	200	Reference				59.86 dBuV	
100	200	65.86	6.0 dB	-0.6 dB	0.6 dB	0.06 dB	0.05 dB
10	200	55.86	-4.0 dB	-0.4 dB	0.4 dB	0.06 dB	0.05 dB
5	200	50.86	-9.0 dB	-0.7 dB	0.7 dB	-0.42 dB	0.05 dB

Incoming Results

Band B

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 0.15500 MHz							
1000	20	Reference				59.84 dBuV	
316	20	54.84	-5.0 dB	-0.5 dB	0.5 dB	-0.25 dB	0.05 dB
100	20	49.84	-10.0 dB	-1.0 dB	1.0 dB	-0.02 dB	0.05 dB
32	20	44.84	-15.0 dB	-1.5 dB	1.5 dB	-0.10 dB	0.05 dB
25	20	43.84	-16.0 dB	-1.6 dB	1.6 dB	-0.10 dB	0.05 dB
10	20	39.84	-20.0 dB	-2.0 dB	2.0 dB	-0.05 dB	0.05 dB
5	20	34.84	-25.0 dB	-2.3 dB	2.3 dB	-0.59 dB	0.05 dB
Fin = 15.00000 MHz							
1000	20	Reference				59.99 dBuV	
316	20	54.99	-5.0 dB	-0.5 dB	0.5 dB	-0.01 dB	0.05 dB
100	20	49.99	-10.0 dB	-1.0 dB	1.0 dB	-0.01 dB	0.05 dB
32	20	44.99	-15.0 dB	-1.5 dB	1.5 dB	0.01 dB	0.05 dB
25	20	43.99	-16.0 dB	-1.6 dB	1.6 dB	-0.09 dB	0.05 dB
10	20	39.99	-20.0 dB	-2.0 dB	2.0 dB	-0.05 dB	0.05 dB
5	20	34.99	-25.0 dB	-2.3 dB	2.3 dB	-0.62 dB	0.05 dB
Fin = 29.99500 MHz							
1000	20	Reference				60.05 dBuV	
316	20	55.05	-5.0 dB	-0.5 dB	0.5 dB	-0.01 dB	0.05 dB
100	20	50.05	-10.0 dB	-1.0 dB	1.0 dB	-0.01 dB	0.05 dB
32	20	45.05	-15.0 dB	-1.5 dB	1.5 dB	0.01 dB	0.05 dB
25	20	44.05	-16.0 dB	-1.6 dB	1.6 dB	-0.09 dB	0.05 dB
10	20	40.05	-20.0 dB	-2.0 dB	2.0 dB	-0.05 dB	0.05 dB
5	20	35.05	-25.0 dB	-2.3 dB	2.3 dB	-0.62 dB	0.05 dB

Band C

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 30.03 MHz							
1000	2	Reference				59.79 dBuV	
10000	2	69.79	+10.0 dB	-1.0 dB	1.0 dB	0.02 dB	0.05 dB
316	2	54.79	-5.0 dB	-0.5 dB	0.5 dB	-0.04 dB	0.05 dB
100	2	49.79	-10.0 dB	-1.0 dB	1.0 dB	-0.05 dB	0.05 dB
32	2	39.79	-20.0 dB	-2.0 dB	2.0 dB	0.21 dB	0.05 dB
Fin = 165.00 MHz							
1000	2	Reference				59.90 dBuV	
10000	2	69.90	+10.0 dB	-1.0 dB	1.0 dB	0.00 dB	0.05 dB
316	2	54.90	-5.0 dB	-0.5 dB	0.5 dB	-0.03 dB	0.05 dB
100	2	49.90	-10.0 dB	-1.0 dB	1.0 dB	-0.03 dB	0.05 dB
32	2	39.90	-20.0 dB	-2.0 dB	2.0 dB	0.22 dB	0.05 dB
Fin = 299.97 MHz							
1000	2	Reference				59.91 dBuV	
10000	2	69.91	+10.0 dB	-1.0 dB	1.0 dB	0.00 dB	0.05 dB
316	2	54.91	-5.0 dB	-0.5 dB	0.5 dB	-0.03 dB	0.05 dB
100	2	49.91	-10.0 dB	-1.0 dB	1.0 dB	-0.03 dB	0.05 dB
32	2	39.91	-20.0 dB	-2.0 dB	2.0 dB	0.21 dB	0.05 dB

Incoming Results

Band D

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 300.03 MHz							
1000	2	Reference				60.13 dBuV	
10000	2	70.13	+10.0 dB	-1.0 dB	1.0 dB	0.01 dB	0.05 dB
316	2	55.13	-5.0 dB	-0.5 dB	0.5 dB	-0.02 dB	0.05 dB
100	2	50.13	-10.0 dB	-1.0 dB	1.0 dB	-0.02 dB	0.05 dB
32	2	40.13	-20.0 dB	-2.0 dB	2.0 dB	0.21 dB	0.05 dB
Fin = 650.00 MHz							
1000	2	Reference				59.81 dBuV	
10000	2	69.81	+10.0 dB	-1.0 dB	1.0 dB	0.01 dB	0.05 dB
316	2	54.81	-5.0 dB	-0.5 dB	0.5 dB	-0.02 dB	0.05 dB
100	2	49.81	-10.0 dB	-1.0 dB	1.0 dB	-0.02 dB	0.05 dB
32	2	39.81	-20.0 dB	-2.0 dB	2.0 dB	0.21 dB	0.05 dB
Fin = 999.97 MHz							
1000	2	Reference				59.96 dBuV	
10000	2	69.96	+10.0 dB	-1.0 dB	1.0 dB	0.01 dB	0.05 dB
316	2	54.96	-5.0 dB	-0.5 dB	0.5 dB	-0.01 dB	0.05 dB
100	2	49.96	-10.0 dB	-1.0 dB	1.0 dB	-0.01 dB	0.05 dB
32	2	39.96	-20.0 dB	-2.0 dB	2.0 dB	0.22 dB	0.05 dB

Band E

fp /Hz	width /us	level /dBuV		DLL	DUL	actual	MU
Fin = 1000.25 MHz							
1000	0.2	Reference				60.35 dBuV	
100000	0.2	80.35	+20.0 dB	-2.0 dB	2.0 dB	-0.01 dB	0.05 dB
10000	0.2	70.35	+10.0 dB	-1.0 dB	1.0 dB	0.00 dB	0.05 dB
316	0.2	50.35	-10.0 dB	-1.0 dB	1.0 dB	0.28 dB	0.05 dB
Fin = 7999.75 MHz							
1000	0.2	Reference				60.48 dBuV	
100000	0.2	80.48	+20.0 dB	-2.0 dB	2.0 dB	0.00 dB	0.05 dB
10000	0.2	70.48	+10.0 dB	-1.0 dB	1.0 dB	0.00 dB	0.05 dB
316	0.2	50.48	-10.0 dB	-1.0 dB	1.0 dB	0.27 dB	0.05 dB

Response to intermittent disturbance

fp /Hz	width /ms	weighting /dB	DLL /dB	DUL /dB	actual /dB	MU /dB
Band A						
Fin = 9.05 kHz						
0.625	160	-7.9	-1.00	1.00	-0.14	0.05
Fin = 75.00 kHz						
0.625	160	-7.9	-1.00	1.00	-0.14	0.05
Fin = 149.95 kHz						
0.625	160	-7.9	-1.00	1.00	-0.13	0.05

Incoming Results

Band B

Fin = 0.15500 MHz

0.625	160	-7.9	-1.00	1.00	-0.19	0.05

Fin = 15.00000 MHz

0.625	160	-7.9	-1.00	1.00	-0.18	0.05

Fin = 29.99500 MHz

0.625	160	-7.9	-1.00	1.00	-0.18	0.05

Band C

Fin = 30.03 MHz

0.625	100	-9.0	-1.00	1.00	-0.20	0.05

Fin = 165.00 MHz

0.625	100	-9.0	-1.00	1.00	-0.20	0.05

Fin = 299.97 MHz

0.625	100	-9.0	-1.00	1.00	-0.20	0.05

Band D

Fin = 300.03 MHz

0.625	100	-9.0	-1.00	1.00	-0.19	0.05

Fin = 650.00 MHz

0.625	100	-9.0	-1.00	1.00	-0.19	0.05

Fin = 999.97 MHz

0.625	100	-9.0	-1.00	1.00	-0.19	0.05

Band E

Fin = 1000.25 MHz

0.625	100	-9.0	-1.00	1.00	0.03	0.05

Fin = 7999.75 MHz

0.625	100	-9.0	-1.00	1.00	0.03	0.05

Incoming Results