Occupied bandwidth & Frequency stability

No.1-7260/23-01-18_TR1-A201-R1

May 17, 2024

Test Standard(s) Systems FCC.ISED - NI

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2024.05.17 12:12:36 +02'00'

Authorized

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Lab Manager
Radio Labs

Systems FCC.ISED # Frequency stability over temperature & voltage ~ TID045_FCC,ISED_FrequencyStability 57000-64000 MHz

References

TC start	05.04.2024 08:51:01
Ambit temp [°C] | humidity [rel%]	not enabled | not enabled
System version	5.0.3.7
Standard | Version	Systems FCC.ISED | NI
Method	
Description	Systems FCC ISED Freq stability over temp/volt
Information	

Equipment

Signal analyzer,Rohde&Schwarz,FSW-50,1331.5003K50/101332,5.30SP1
Power supply,Agilent Technologies,N5767A,US14J1569P,B.00.06,REV:F
Climatic box,CTS T40/50,,NI

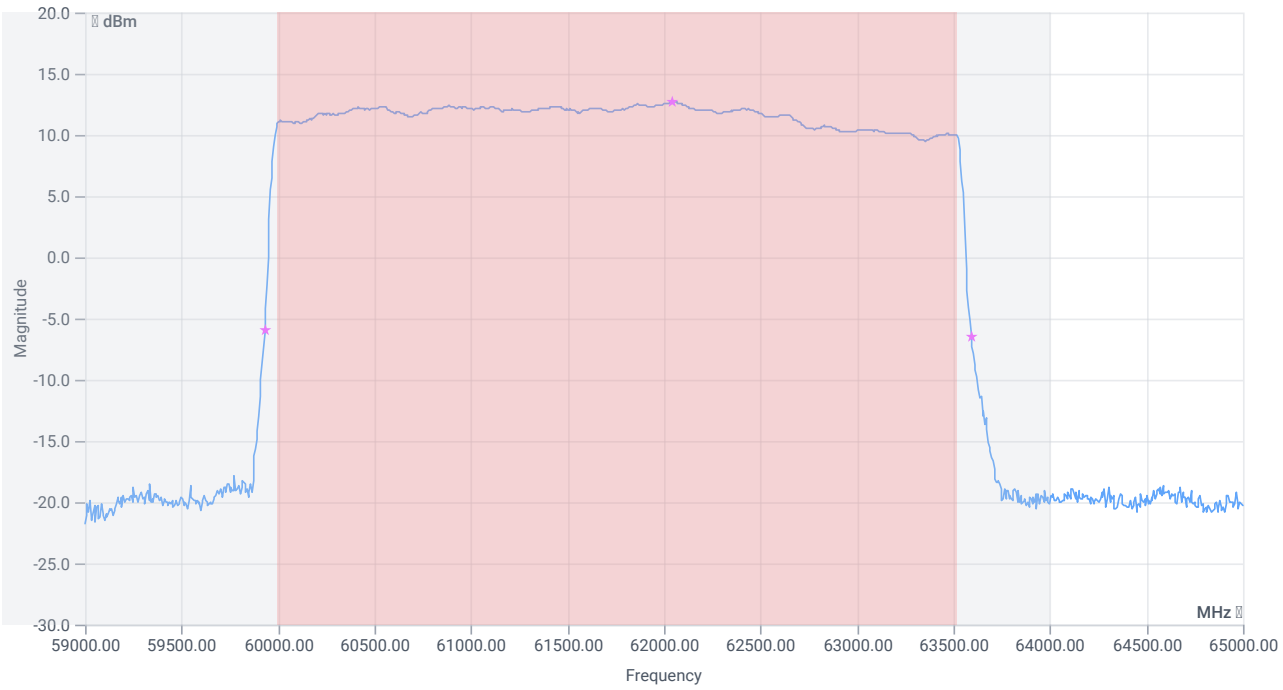
Test Parameter

EUT port	
Temperature	var
Voltage	var
Auto control enabled power supply | Climatic Box	Yes | Yes
Full path type	
Full path name	
Switch bits	

Test for temperature[°C]: 20 | voltage [V]: 14

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	20.00 | 39 | 0
Start [MHz] | Stop [MHz]	59000.000 | 65000.000
RBW [MHz] | VBW [MHz]	50.000000 | 80.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	330000 | 1 | 1001 | SWE



BW

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	3526.906	MHz	INFO
T1 99%	57000	---	59991.3711	MHz	PASS
T2 99%	---	64000	63518.2771	MHz	PASS

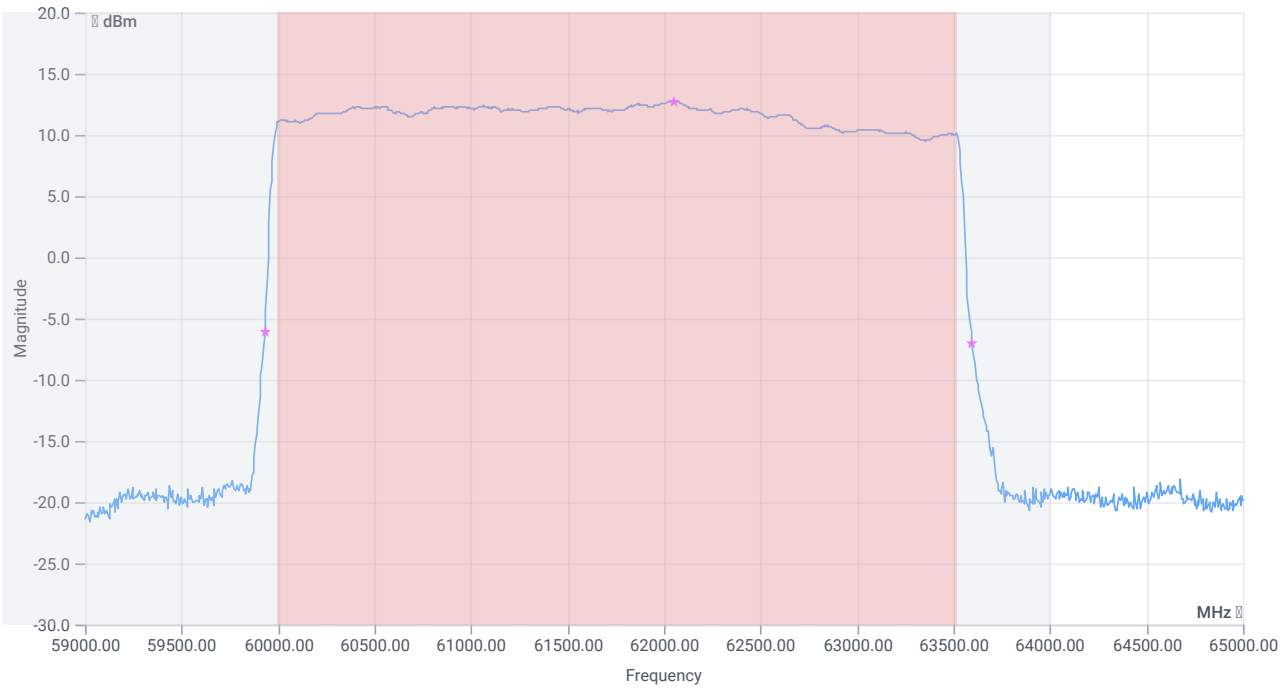
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	3660	MHz	INFO
Reference freq.	---	---	62042	MHz	INFO
T1 20dB	57000	---	59930.0000	MHz	PASS
T2 20dB	---	64000	63590.0000	MHz	PASS

Test for temperature[°C]: 20 | voltage [V]: 11.9

READ SA SETTINGS:

RefLevel [dBm]	RefLevelOffset [dB]	InpAtt [dB]	20.00 | 39 | 0
Start [MHz] | Stop [MHz]	59000.000 | 65000.000
RBW [MHz] | VBW [MHz]	50.000000 | 80.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	330000 | 1 | 1001 | SWE



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RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	3525.906	MHz	INFO
T1 99%	57000	---	59991.4440	MHz	PASS
T2 99%	---	64000	63517.3499	MHz	PASS

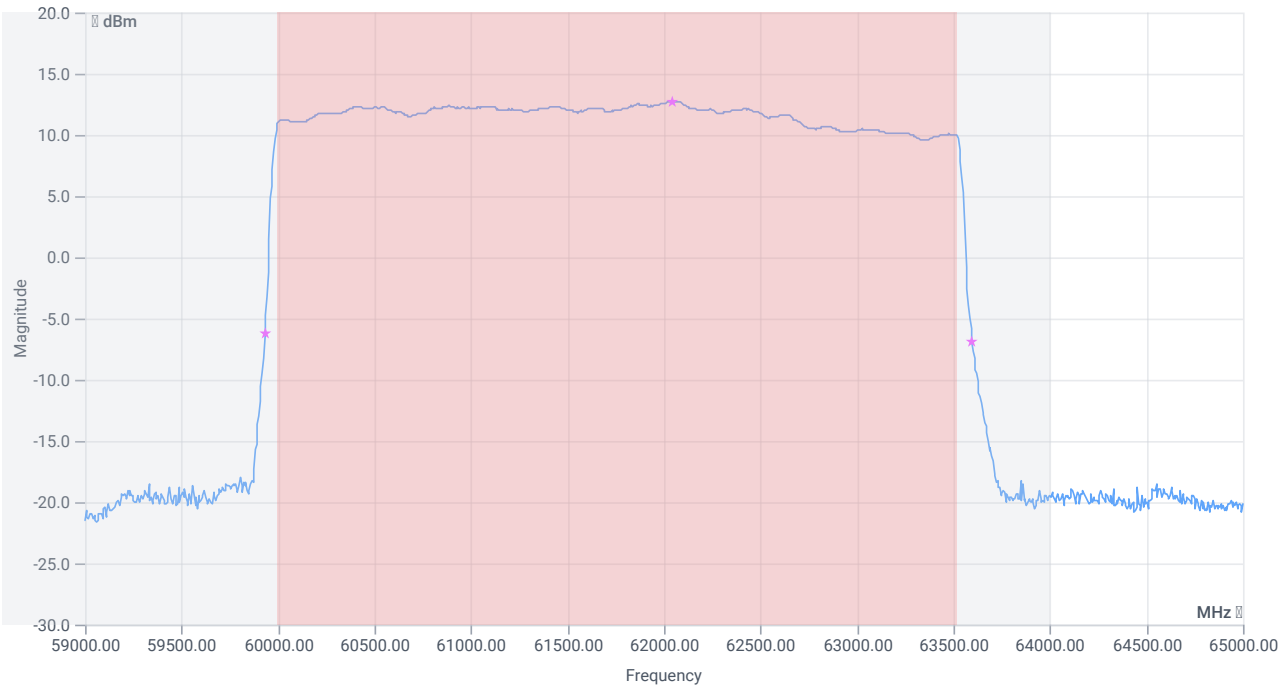
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	3666	MHz	INFO
Reference freq.	---	---	62048	MHz	INFO
T1 20dB	57000	---	59930.0000	MHz	PASS
T2 20dB	---	64000	63596.0000	MHz	PASS

Test for temperature[°C]: 20 | voltage [V]: 16.1

READ SA SETTINGS:

RefLevel [dBm]	RefLevelOffset [dB]	InpAtt [dB]	20.00 | 39 | 0
Start [MHz] | Stop [MHz]	59000.000 | 65000.000
RBW [MHz] | VBW [MHz]	50.000000 | 80.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	330000 | 1 | 1001 | SWE



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RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	3524.396	MHz	INFO
T1 99%	57000	---	59994.1074	MHz	PASS
T2 99%	---	64000	63518.5031	MHz	PASS

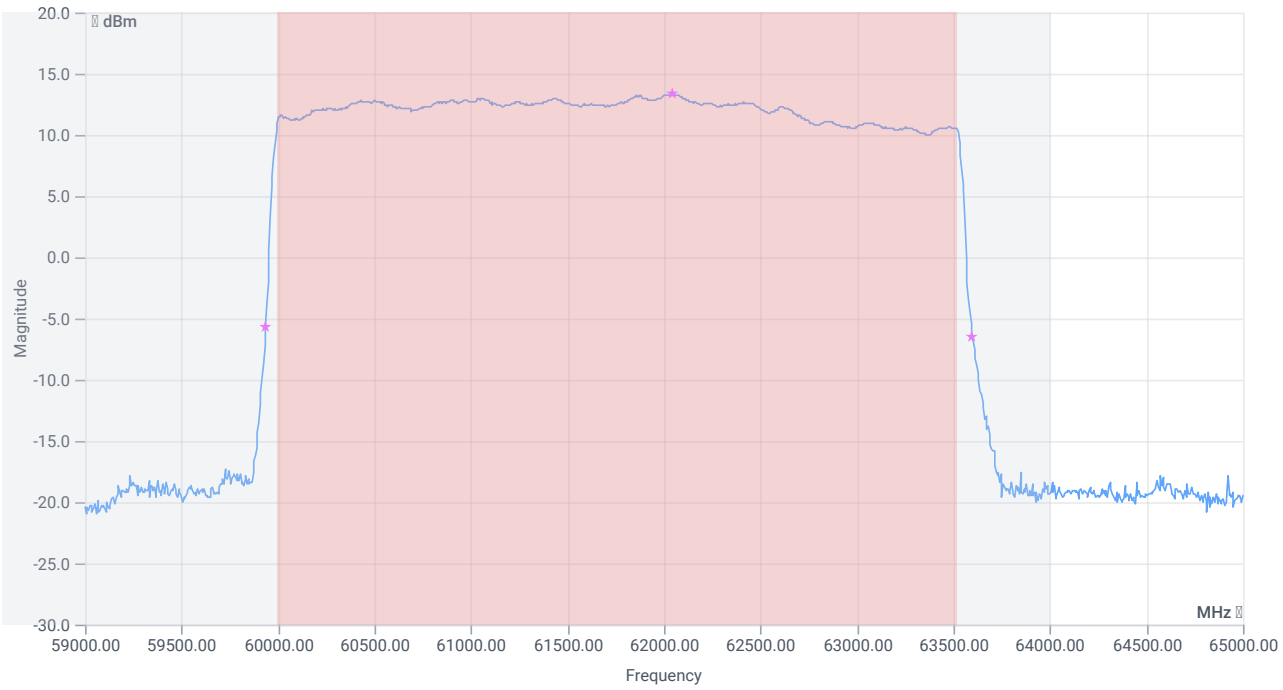
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	3666	MHz	INFO
Reference freq.	---	---	62042	MHz	INFO
T1 20dB	57000	---	59930.0000	MHz	PASS
T2 20dB	---	64000	63596.0000	MHz	PASS

Test for temperature[°C]: -20 | voltage [V]: 14

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	20.00 | 39 | 0
Start [MHz] | Stop [MHz]	59000.000 | 65000.000
RBW [MHz] | VBW [MHz]	50.000000 | 80.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	330000 | 1 | 1001 | SWE



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RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	3521.181	MHz	INFO
T1 99%	57000	---	59998.0944	MHz	PASS
T2 99%	---	64000	63519.2749	MHz	PASS

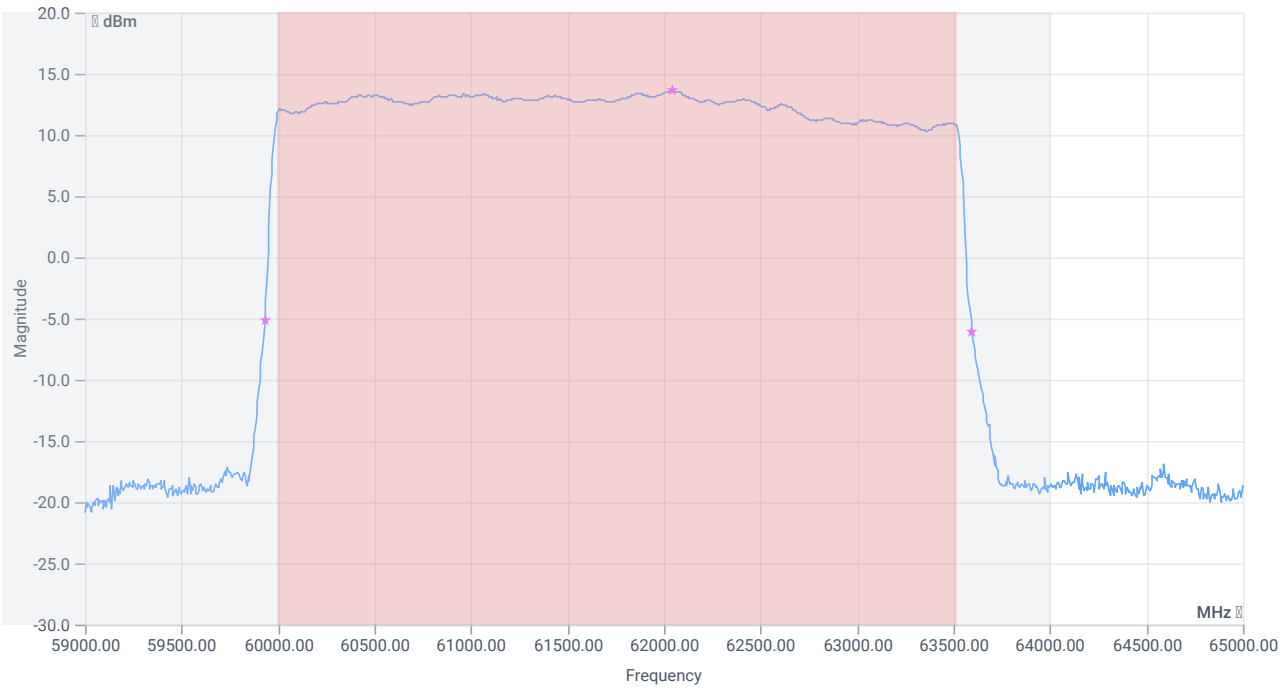
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	3660	MHz	INFO
Reference freq.	---	---	62042	MHz	INFO
T1 20dB	57000	---	59936.0000	MHz	PASS
T2 20dB	---	64000	63596.0000	MHz	PASS

Test for temperature[°C]: -10 | voltage [V]: 14

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	20.00 | 39 | 0
Start [MHz] | Stop [MHz]	59000.000 | 65000.000
RBW [MHz] | VBW [MHz]	50.000000 | 80.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	330000 | 1 | 1001 | SWE



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RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	3523.002	MHz	INFO
T1 99%	57000	---	59993.7834	MHz	PASS
T2 99%	---	64000	63516.7856	MHz	PASS

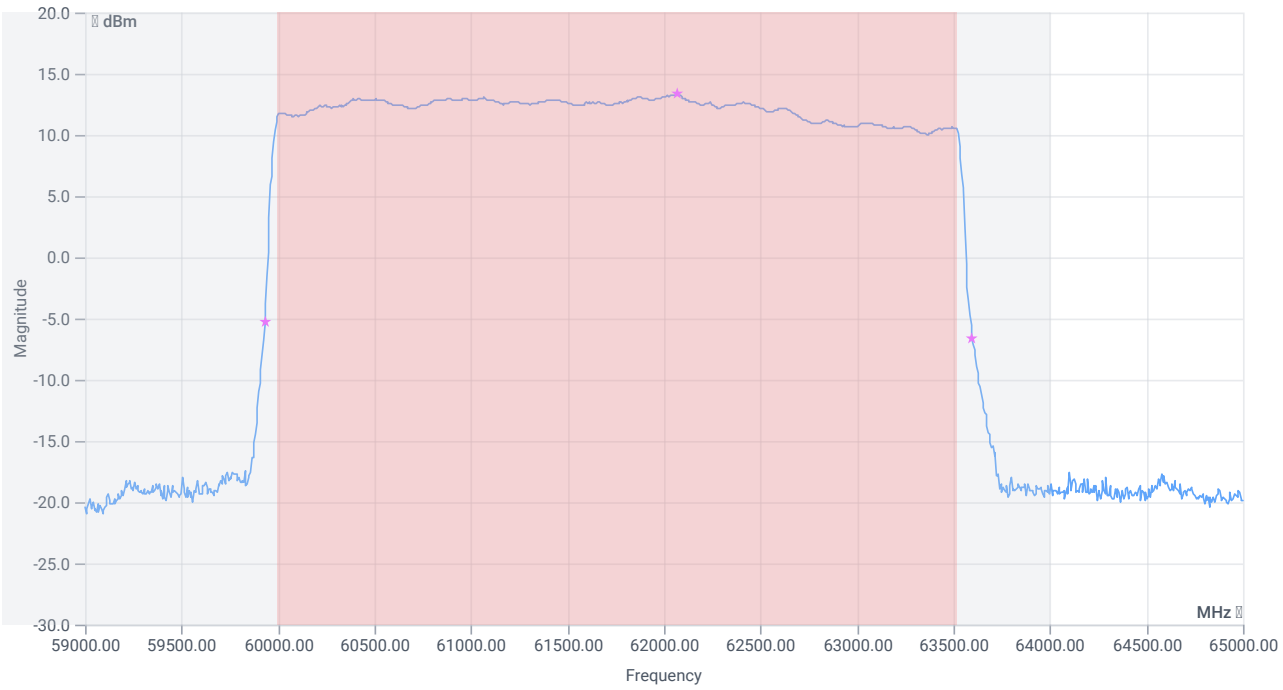
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	3666	MHz	INFO
Reference freq.	---	---	62042	MHz	INFO
T1 20dB	57000	---	59930.0000	MHz	PASS
T2 20dB	---	64000	63596.0000	MHz	PASS

Test for temperature[°C]: 0 | voltage [V]: 14

READ SA SETTINGS:

RefLevel [dBm]	RefLevelOffset [dB]	InpAtt [dB]	20.00 | 39 | 0
Start [MHz] | Stop [MHz]	59000.000 | 65000.000
RBW [MHz] | VBW [MHz]	50.000000 | 80.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	330000 | 1 | 1001 | SWE



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RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	3525.201	MHz	INFO
T1 99%	57000	---	59992.2745	MHz	PASS
T2 99%	---	64000	63517.4756	MHz	PASS

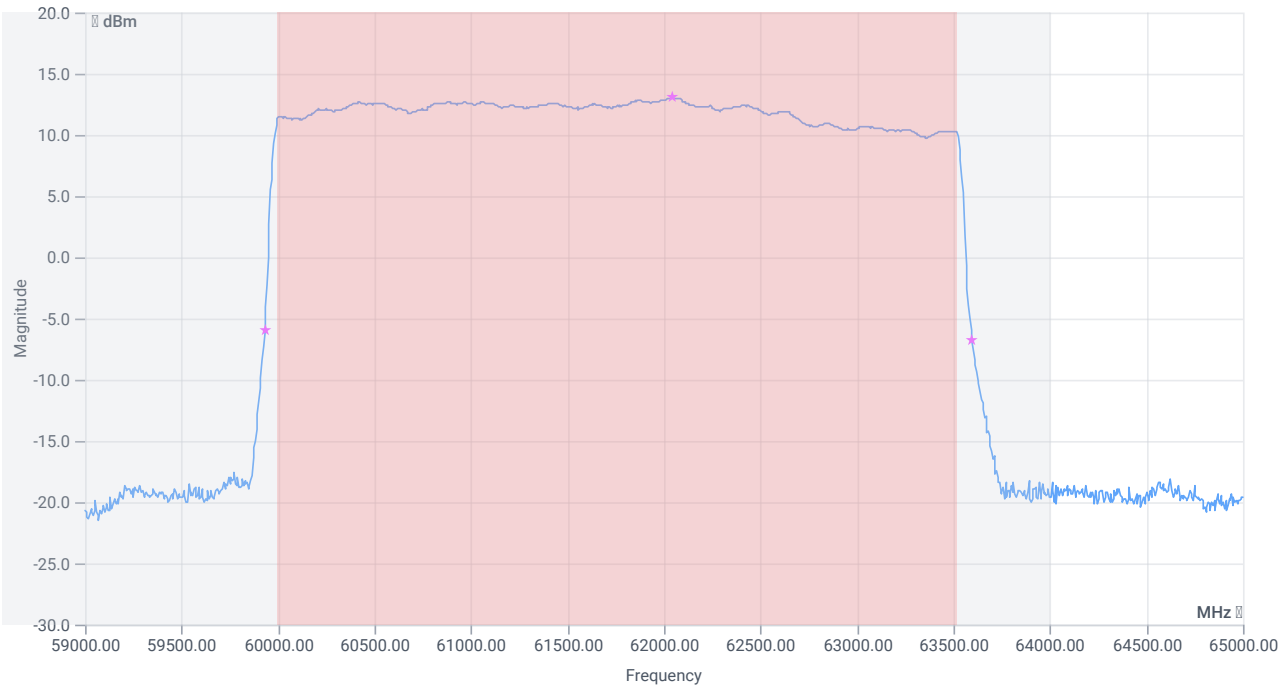
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	3666	MHz	INFO
Reference freq.	---	---	62066	MHz	INFO
T1 20dB	57000	---	59930.0000	MHz	PASS
T2 20dB	---	64000	63596.0000	MHz	PASS

Test for temperature[°C]: 10 | voltage [V]: 14

READ SA SETTINGS:

RefLevel [dBm]	RefLevelOffset [dB]	InpAtt [dB]	20.00 | 39 | 0
Start [MHz] | Stop [MHz]	59000.000 | 65000.000
RBW [MHz] | VBW [MHz]	50.000000 | 80.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	330000 | 1 | 1001 | SWE



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RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	3524.788	MHz	INFO
T1 99%	57000	---	59992.5579	MHz	PASS
T2 99%	---	64000	63517.3456	MHz	PASS

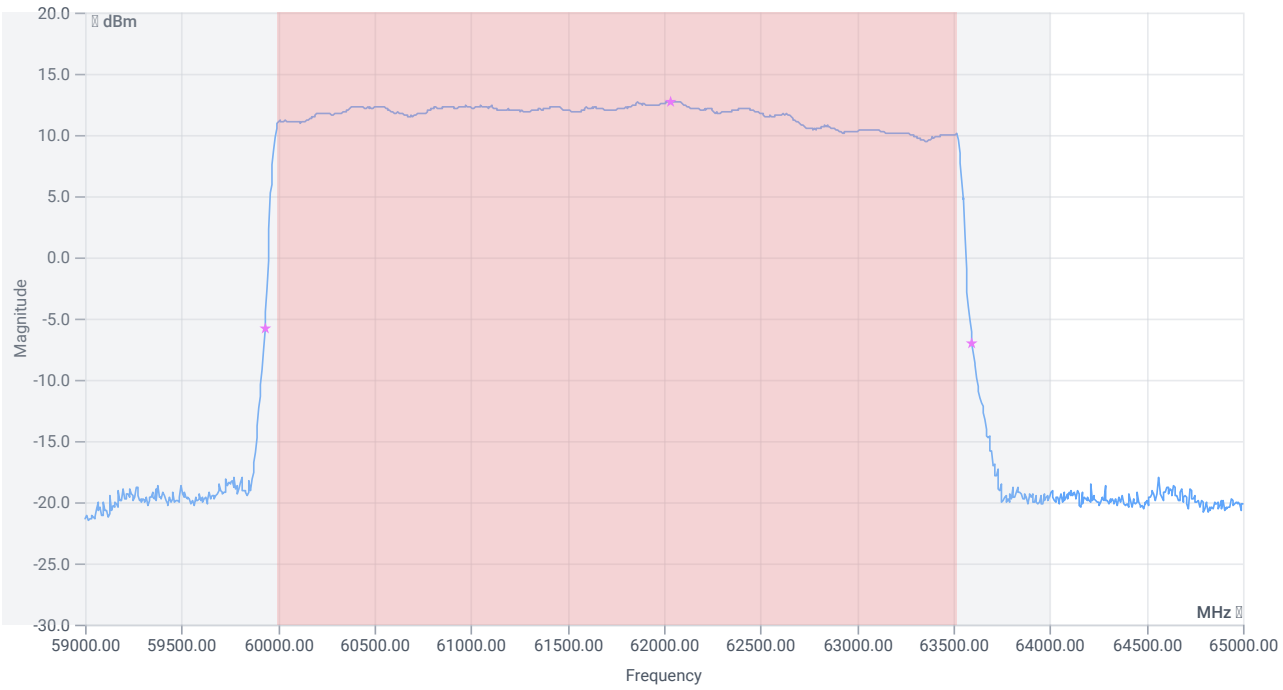
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	3666	MHz	INFO
Reference freq.	---	---	62042	MHz	INFO
T1 20dB	57000	---	59930.0000	MHz	PASS
T2 20dB	---	64000	63596.0000	MHz	PASS

Test for temperature[°C]: 20 | voltage [V]: 14

READ SA SETTINGS:

RefLevel [dBm]	RefLevelOffset [dB]	InpAtt [dB]	20.00 | 39 | 0
Start [MHz] | Stop [MHz]	59000.000 | 65000.000
RBW [MHz] | VBW [MHz]	50.000000 | 80.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	330000 | 1 | 1001 | SWE



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RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	3524.498	MHz	INFO
T1 99%	57000	---	59992.8625	MHz	PASS
T2 99%	---	64000	63517.3606	MHz	PASS

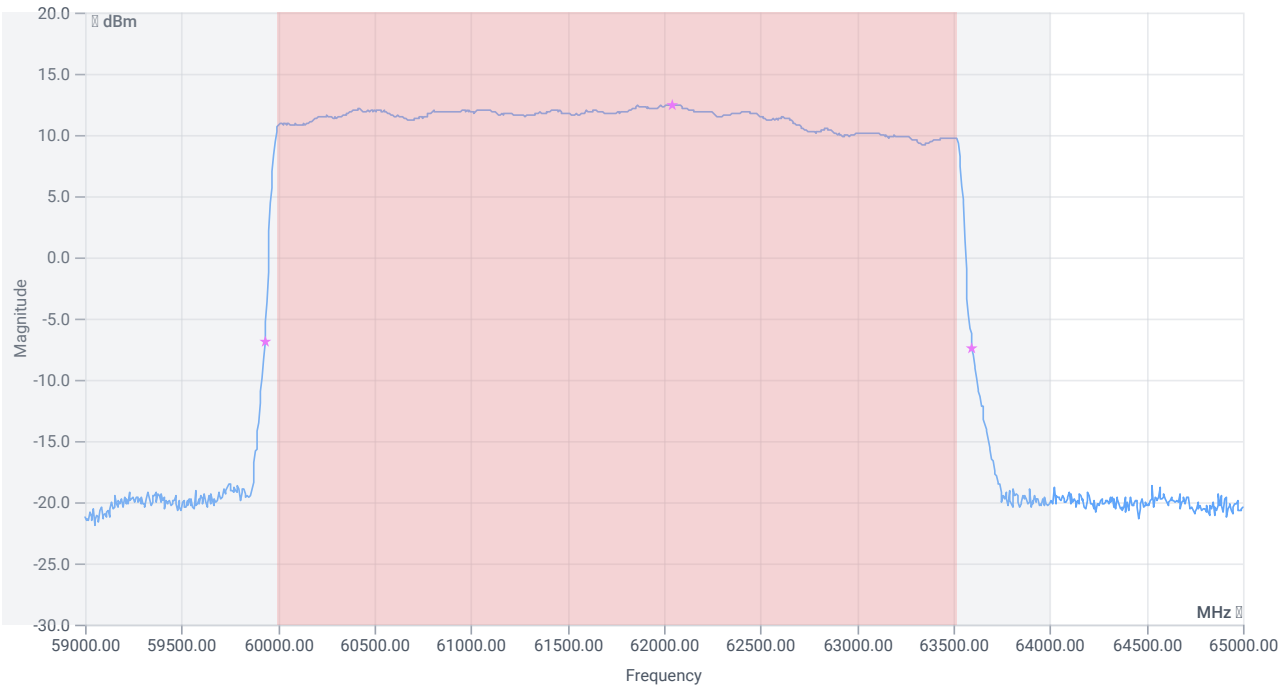
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	3666	MHz	INFO
Reference freq.	---	---	62036	MHz	INFO
T1 20dB	57000	---	59930.0000	MHz	PASS
T2 20dB	---	64000	63596.0000	MHz	PASS

Test for temperature[°C]: 30 | voltage [V]: 14

READ SA SETTINGS:

RefLevel [dBm]	RefLevelOffset [dB]	InpAtt [dB]	20.00 | 39 | 0
Start [MHz] | Stop [MHz]	59000.000 | 65000.000
RBW [MHz] | VBW [MHz]	50.000000 | 80.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	330000 | 1 | 1001 | SWE



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RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	3523.593	MHz	INFO
T1 99%	57000	---	59993.7070	MHz	PASS
T2 99%	---	64000	63517.3000	MHz	PASS

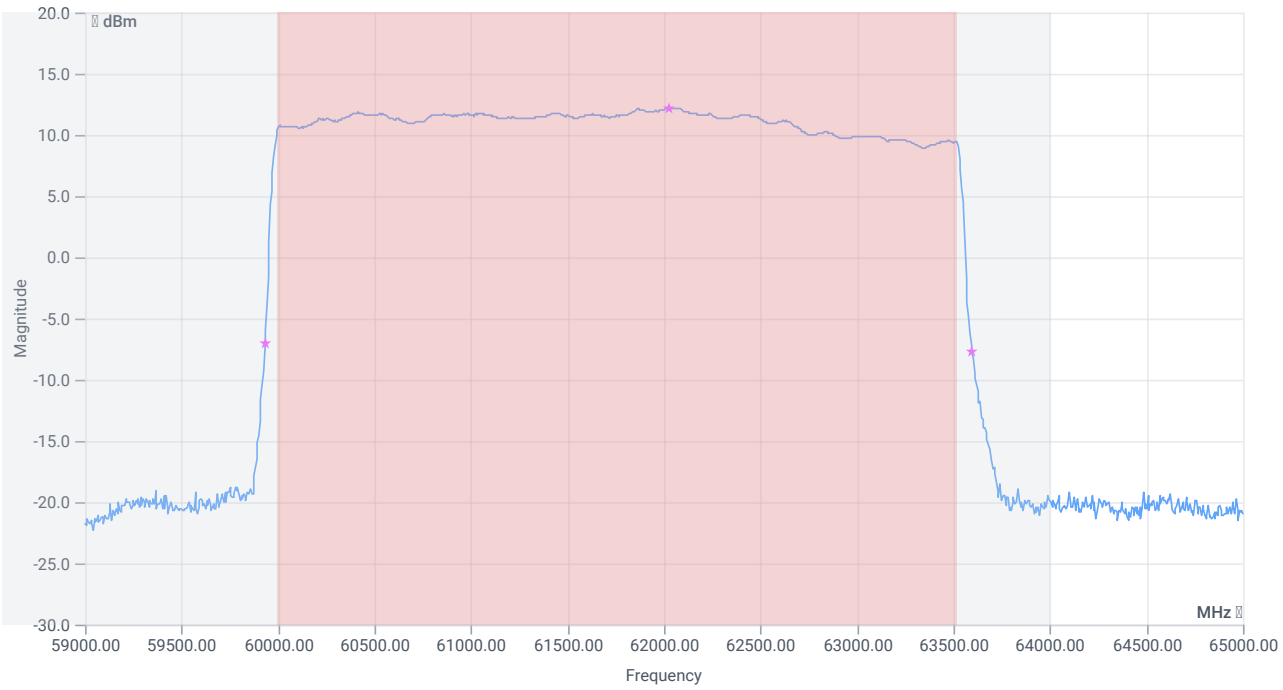
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	3666	MHz	INFO
Reference freq.	---	---	62042	MHz	INFO
T1 20dB	57000	---	59930.0000	MHz	PASS
T2 20dB	---	64000	63596.0000	MHz	PASS

Test for temperature[°C]: 40 | voltage [V]: 14

READ SA SETTINGS:

RefLevel [dBm]	RefLevelOffset [dB]	InpAtt [dB]	20.00 | 39 | 0
Start [MHz] | Stop [MHz]	59000.000 | 65000.000
RBW [MHz] | VBW [MHz]	50.000000 | 80.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	330000 | 1 | 1001 | SWE



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RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	3523.352	MHz	INFO
T1 99%	57000	---	59993.6832	MHz	PASS
T2 99%	---	64000	63517.0350	MHz	PASS

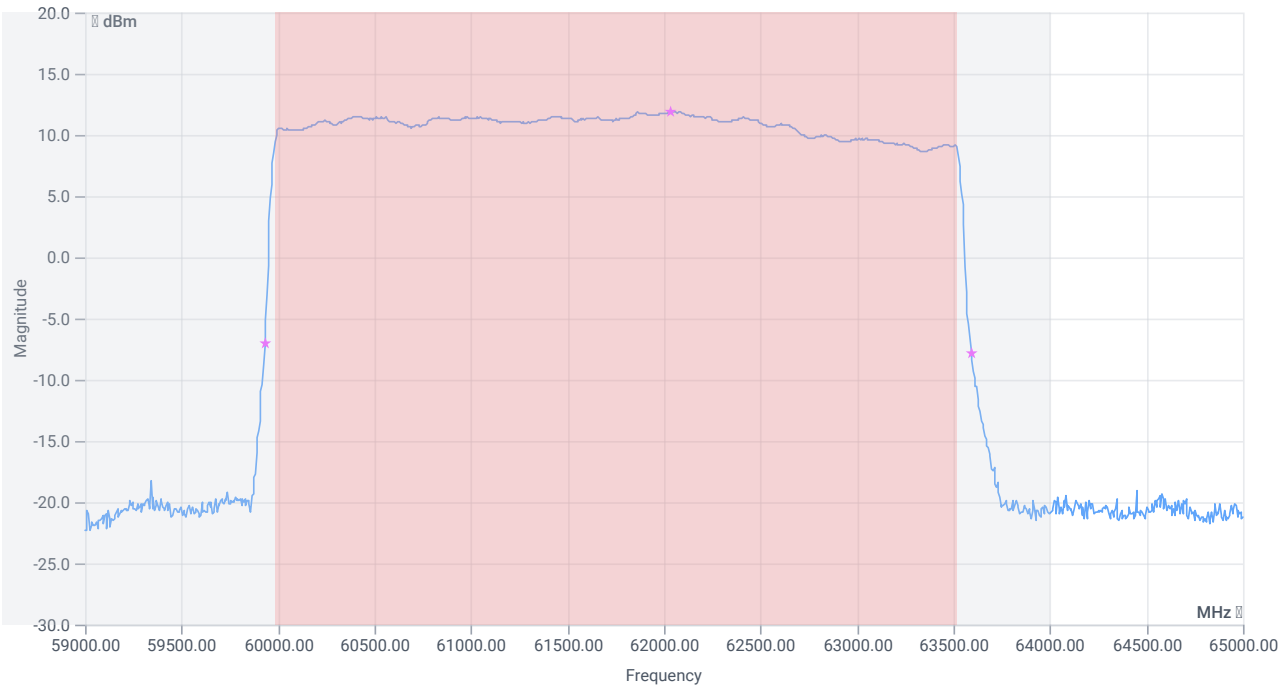
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	3666	MHz	INFO
Reference freq.	---	---	62024	MHz	INFO
T1 20dB	57000	---	59930.0000	MHz	PASS
T2 20dB	---	64000	63596.0000	MHz	PASS

Test for temperature[°C]: 50 | voltage [V]: 14

READ SA SETTINGS:

RefLevel [dBm]	RefLevelOffset [dB]	InpAtt [dB]	20.00 | 39 | 0
Start [MHz] | Stop [MHz]	59000.000 | 65000.000
RBW [MHz] | VBW [MHz]	50.000000 | 80.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	330000 | 1 | 1001 | SWE



BW

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	3524.709	MHz	INFO
T1 99%	57000	---	59989.8847	MHz	PASS
T2 99%	---	64000	63514.5940	MHz	PASS

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	3660	MHz	INFO
Reference freq.	---	---	62036	MHz	INFO
T1 20dB	57000	---	59930.0000	MHz	PASS
T2 20dB	---	64000	63590.0000	MHz	PASS

Verdict

PASS

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