

RF Test Report

Applicant : Micro-Star INT'L CO., LTD.
Product Name : Industrial Data Machine
Trade Name : msi
Model Number : MS-C923
Applicable Standard : FCC 47 CFR PART 22H
FCC 47 CFR PART 24E
FCC 47 CFR PART 27L
ANSI C63.26 2015
Received Date : Apr. 23, 2025
Test Period : May 15, 2025 ~ Jun. 05, 2025
Issued Date : Jul. 07, 2025

Issued by

Eurofins E&E Wireless Taiwan Co., Ltd.
No. 140-1, Changan Street, Bade District,
Taoyuan City, Taiwan (R.O.C.)
Tel : +886-3-2710188 / Fax : +886-3-2710190



Taiwan Accreditation Foundation accreditation number: 1330
Frequency Range: 9 kHz to 40 GHz
Bade test site :
Test Firm Registration Number: 226252
Test Firm Designation Number: TW0010
Wugu test site :
Test Firm Registration Number: 191812
Test Firm Designation Number: TW0034

Note:

1. The test results are valid only for samples provided by customers and under the test conditions described in this report.
2. This report shall not be reproduced except in full, without the written approval of Eurofins E&E Wireless Taiwan Co., Ltd.
3. The relevant information is provided by customers in this test report. According to the correctness, appropriateness or completeness of the information provided by the customer, if there is any doubt or error in the information which affects the validity of the test results, the laboratory does not take the responsibility.

Revision History

Rev.	Issued Date	Description	Revised by
00	Jul. 07, 2025	Initial Issue	Snow Wang

Verification of Compliance

Applicant : Micro-Star INT'L CO., LTD.

Product Name : Industrial Data Machine

Trade Name : msi

Model Number : MS-C923

FCC ID : I4L-MSC923

Applicable Standard : FCC 47 CFR PART 22H
FCC 47 CFR PART 24E
FCC 47 CFR PART 27L
ANSI C63.26 2015

Test Result : Complied

Issued By : Eurofins E&E Wireless Taiwan Co., Ltd.
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Taiwan Accreditation Foundation accreditation number: 1330



Eurofins E&E Wireless Taiwan Co., Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by Eurofins E&E Wireless Taiwan Co., Ltd. based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Approved By : _____

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1 General Information

1.1. Summary of Test Result

FCC Rule	Description	Result
§2.1046	Conducted Output Power	Reference
§22.913(a)(5)	Effective Radiated Power	Pass
§24.232(c) §27.50(d)(4)	Equivalent Isotropic Radiated Power	Pass
§24.232(d) §27.50 KDB 971168 D01 (5.7.1)	Peak to Average Power Ratio	Pass
§2.1049 §22.917(a) §24.238(a) §27.53(g)	Emission Bandwidth & Occupied Bandwidth	Reference
§2.1051 §22.917(a) §24.238(a) §27.53(h)	Band Edge Measurement	Pass
§2.1051 §22.917(a) §24.238(a) §27.53(h)	Conducted Spurious Emission	Pass
§2.1053 §22.917(a) §24.238(a) §27.53(h)	Field Strength of Spurious Radiation	Pass
§2.1055 §22.355 §24.235 §27.54	Frequency Stability for Temperature & Voltage	Pass

Decision Rule

- ☒ Uncertainty is not included.
☐ Uncertainty is included.

1.2. Testing Location

Lab Name: Eurofins E&E Wireless Taiwan Co., Ltd.
 Site Address: ☒ No. 140-1, Changan Street, Bade District, Taoyuan City, Taiwan (R.O.C.)
 Site Address: ☐ No. 2, Wuquan 5th Rd. Wugu Dist., New Taipei City, Taiwan (R.O.C.)

1.3. Measurement Uncertainty

Parameter	Uncertainty				
	BD	WG			
Conducted Output Average Power	1.1 dB	1.1 dB			
Effective Radiated Power / Equivalent Isotropic Radiated Power	1.1 dB	1.1 dB			
Frequency Stability	1.3 x 10 ⁻⁷ x fc (Hz)	1.3 x 10 ⁻⁷ x fc (Hz)			
Emission Bandwidth & Occupied Bandwidth	4.4 %	4.4 %			
Peak to Average Power Ratio	1.1 dB	1.1 dB			
Band Edge	1.1 dB	1.1 dB			
Conducted Spurious Emission	1.1 dB	1.1 dB			
Parameter	Uncertainty				
	96601-BD	96603-BD	96602-WG	96603-WG	96604-WG
Radiated Emission	6.3 dB	6.3 dB	6.3 dB	6.3 dB	6.3 dB

1.4. Test Site Environment

Items	Required (IEC 60068-1)	Interval(*)
Temperature (°C)	15-35	20-30
Humidity (%RH)	25-75	45-75

(*)The measurement ambient temperature is within this range.

Test Setting Condition		
L.V.	Low Voltage	DC 3.27 V
N.V.	Normal Voltage	DC 3.85 V
H.V.	High Voltage	DC 4.43 V
L.T.	Low Temperature	-20 °C
N.T.	Normal Temperature	+25 °C
H.T.	High Temperature	+60 °C

2 EUT Description

The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity(except Max. RF Output Powe, E.R.P. /E.I.R.P., Occupied Bandwidth, Emission Designator).

Applicant	Micro-Star INT'L CO., LTD. No.69, Lide St., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C)			
Product Name	Industrial Data Machine			
Trade Name	msi			
Model Number	MS-C923			
FCC ID	I4L-MSC923			
IMEI No.	869283050935867			
Mode	Band	UL Frequency (MHz)	DL Frequency (MHz)	Modulation
WCDMA(RMC12.2K)/ HSDPA/ HSUPA	II	1852.4 ~ 1907.6	1932.4 ~ 1987.6	QPSK, BPSK
	IV	1712.4 ~ 1752.6	2112.4 ~ 2152.6	QPSK, BPSK
	V	826.4 ~ 846.6	871.4 ~ 891.6	QPSK, BPSK
Antenna information	Type		Max. Gain (dBi)	
	Dipole Antenna		WCDMA/ HSDPA/ HSUPA Band II	2.44
			WCDMA/ HSDPA/ HSUPA Band IV	2.97
			WCDMA/ HSDPA/ HSUPA Band V	-0.80
Operate Temp. Range	-20 ~ 60 °C			
EUT Power Rating	DC 19 V, 3.42 A			

Frequency Band	E.R.P. /E.I.R.P. (W)		Occupied Bandwidth (MHz)	Emission Designator
WCDMA/ HSDPA/ HSUPA Band II	0.571	(E.I.R.P.)	4.1175	4M12F9W
WCDMA/ HSDPA/ HSUPA Band IV	0.555	(E.I.R.P.)	4.1194	4M12F9W
WCDMA/ HSDPA/ HSUPA Band V	0.157	(E.R.P.)	4.1244	4M12F9W

Testing Sample No.	
Test Item	Sample Number
Radiated Emissions	C254288_A004
Conducted	C254288_A004

2.1. Mode of Operation

Eurofins has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
WCDMA Band II Link Mode
WCDMA Band IV Link Mode
WCDMA Band V Link Mode

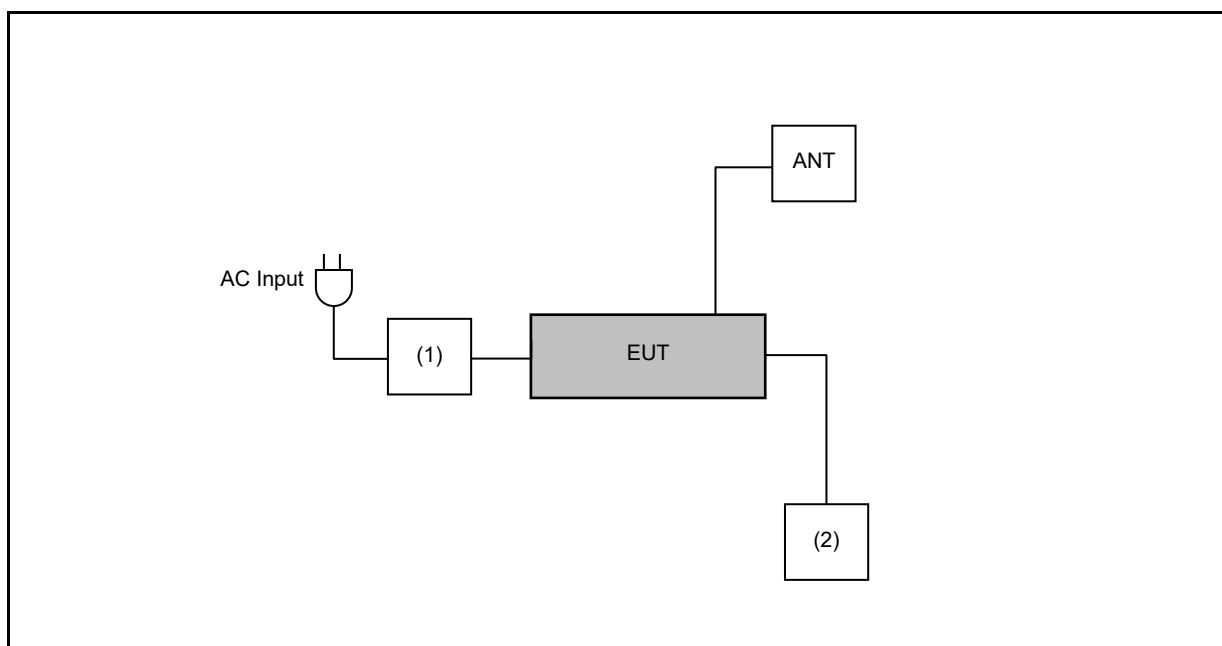
Note: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.

By preliminary testing and verifying three axis (X, Y and Z) position of EUT transmitted status, it was found that "X axis" position was the worst, then the final test was executed the worst condition and test data were recorded in this report.

2.2. EUT Test Step

1	Setup the EUT shown on "Configuration of Test System Details".
2	Turn on the power of all equipment.

2.3. Configuration of Test System Details



Devices Description					
	Product	Manufacturer	Model Number	Serial Number	Power Cord
(1)	Adapter	Microseni	PD-9501GR/AC	---	---
(2)	Monitor	ASUS	VP327	---	---

2.4. Test Instruments

For Conducted

Test Period: May 15, 2025 ~ May 16, 2025

Testing Engineer: Eric Ou Yang, Amy Wen

Test Site		RF02-BD				
Use	Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
☐	Divider	Warison	WDIV-210.5-26.5S20	WR222AM2B1	Feb. 18, 2025	1 year
☒	Divider	Warison	WDIV-210.5-26.5S20	WR222AM2B2	Aug. 26, 2024	1 year
☐	Spectrum Analyzer (3 Hz~13.2 GHz)	Agilent	E4445A	MY45300744	Oct. 24, 2024	1 year
☒	Spectrum Analyzer (3 Hz~50 GHz)	Agilent	N9030A	MY53120541	Mar. 07, 2025	1 year
☒	Universal Radio Communication Tester	R&S	CMU200	112387	Mar. 24, 2025	1 year
☐	Wideband Radio Communication Tester	R&S	CMW500	170768	Nov. 30, 2022	1 year
☐	Universal Radio Communication Tester	Agilent	E5515C	MY47511156	Sep. 09, 2024	1 year
☐	Radio Communication Analyzer	Anritsu	MT8820C	6201342039	Dec. 02, 2024	1 year
☐	Radio Communication Analyzer	Anritsu	MT8821C	6201300618	Jun. 06, 2024	1 year
☐	Radio Communication Analyzer	Anritsu	MT8000A	6272354178	Jan. 09, 2025	1 year
☐	UXM 5G Wireless Test Platform	Keysight	E7515B	MY59321574	Jul. 17, 2024	1 year
☐	Signalling Tester	Anritsu	MD8475A	6201357755	Feb. 23, 2025	1 year
☐	USB sound vibration measurement system	National Instruments	USB-4432	1AF01D4	Sep. 03, 2024	1 year
☐	USB sound vibration measurement system	PCB	352C65	LW161409	Sep. 03, 2024	1 year
☐	USB sound vibration measurement system	G.R.A.S	40PH	186006	Aug. 28, 2024	1 year
☒	Temperature & Humidity Chamber	TAICHY	MHU-225LA	980729	Mar. 26, 2025	1 year
☐	Electromagnetic high frequency vibration testing machine	KING DESIGN	KD-9363-EM-30F4K- 10N10	RZ110218299	Aug. 16, 2024	1 year

☒ means with testing used ;

☐ means without testing used

Note: N.C.R. = No Calibration Request..

For Conducted

Test Period: May 15, 2025 ~ May 16, 2025

Testing Engineer: Eric Ou Yang, Amy Wen

Test Site		RF02-BD				
Use	Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
☐	Power Supply	KEITHLEY	2303	4045290	Jan. 03, 2025	1 year
☐	Power Supply	IDRC	CP-268	268711	Dec. 19, 2024	1 year
☒	Power Supply	GW	SPD-3606	GEP891818	Nov. 14, 2024	1 year
☐	Software	PWS Test	1.1.1	N/A	N.C.R.	---
☐	Software	EZ EMC	1.1.4.4	N/A	N.C.R.	---

☒ means with testing used ;

☐ means without testing used

Note: N.C.R. = No Calibration Request..

For Radiated Emissions
Test Period: Jun. 05, 2025
Testing Engineer: Hung Chou

Test Site		96603-BD				
Radiation test sites		Semi Anechoic Room				
Use	Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
☐	Spectrum Analyzer (10 Hz~44 GHz)	Keysight	N9010A	MY52221312	Jan. 04, 2024	1 year
☐	Spectrum Analyzer (3 Hz~50 GHz)	Agilent	N9030A	MY53120541	Dec. 27, 2023	1 year
☒	Spectrum Analyzer (2 Hz~50 GHz)	Keysight	N9030B	MY57143537	Apr. 18, 2023	1 year
☐	Spectrum Analyzer (10 Hz~44 GHz)	Keysight	N9020B	MY60112363	Jan. 10, 2024	1 year
☒	Amplifier (100 kHz~1.3 GHz)	Agilent	8447D	2944A11119	Jan. 10, 2024	1 year
☐	Amplifier (100 kHz~1.3 GHz)	Agilent	8447D	2944A10961	Jul. 10, 2023	1 year
☐	Broadband Amplifier (100 kHz~1 GHz)	Titan	T0910E00014330 A1F	001	Jul. 24, 2023	1 year
☐	Amplifier (1 GHz~26.5 GHz)	Agilent	8449B	3008A02237	Oct. 31, 2023	1 year
☒	Broadband Amplifier (1 GHz~26.5 GHz)	Titan	T0912E01263025 A1F	002	Jul. 24, 2023	1 year
☐	Preamplifier (26.5 GHz~40 GHz)	EMCI	EMC2654045	980028	Sep. 01, 2023	1 year
☐	Preamplifier (18 GHz~40 GHz)	EMCI	EMC184045SE	980861	Dec. 21, 2023	1 year
☒	Loop Antenna (9 kHz~30 MHz)	COM-POWER CORPORATION	AL-130	121014	Mar. 23, 2023	1 year
☒	Trilog Broadband Antenna (30 kHz~1 GHz)	Schwarzbeck Mess-Elektronik	VULB9168	01146	Jun. 26, 2023	1 year
☐	Trilog Broadband Antenna (30 kHz~1 GHz)	Schwarzbeck Mess-Elektronik	VULB9168	416	Jun. 13, 2023	1 year
☒	Broadband Horn Antenna (1 GHz~18 GHz)	Schwarzbeck Mess-Elektronik	9120D	02207	Jul. 07, 2023	1 year
☐	Broadband Horn Antenna (1 GHz~18 GHz)	Schwarzbeck Mess-Elektronik	9120D	9120D-550	Jul. 21, 2023	1 year

☒ means with testing used ;

☐ means without testing used

Note: N.C.R. = No Calibration Request.

For Radiated Emissions
Test Period: Jun. 05, 2025
Testing Engineer: Hung Chou

Test Site		96603-BD				
Radiation test sites		Semi Anechoic Room				
Use	Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
☐	Broadband Horn Antenna (18 GHz~40 GHz)	Schwarzbeck Mess-Elektronik	9170	9170-320	Jul. 21, 2023	1 year
☐	Horn Antenna (18 GHz~40 GHz)	ETS	3116	00086467	Dec. 08, 2023	1 year
☒	Coaxial Cable	Titan	T0710AT327A10A100	J11005	Aug. 10, 2023	1 year
☒	Coaxial Cable	Titan	T0710AT327A10A900	J11004	Aug. 10, 2023	1 year
☒	Coaxial Cable	Titan	CFD400NL-LW	001	Aug. 10, 2023	1 year
☐	Universal Radio Communication Tester	R&S	CMU200	112387	Feb. 24, 2023	1 year
☐	Wideband Radio Communication Tester	R&S	CMW500	170768	Nov. 30, 2022	2 year
☐	Universal Radio Communication Tester	Agilent	E5515C	MY47511156	Sep. 01, 2023	1 year
☐	Radio Communication Analyzer	Anritsu	MT8820C	6201342039	Nov. 30, 2023	1 year
☐	Radio Communication Analyzer	Anritsu	MT8821C	6201300618	Jun. 07, 2023	1 year
☐	UXM 5G Wireless Test Platform	Keysight	E7515B	MY59321574	Jul. 21, 2023	1 year
☐	Radio Communication Analyzer	Anritsu	MT8000A	6272354178	Jan. 11, 2024	1 year
☐	Millimeter-Wave Signal Analyzer Frequency Extension Module (50-75GHz)	VDI	N9029AV15 (SAX 410)	US54250165	Aug. 23, 2023	2 years

☒ means with testing used ;
☐ means without testing used

Note: N.C.R. = No Calibration Request.

For Radiated Emissions
Test Period: Jun. 05, 2025
Testing Engineer: Hung Chou

Test Site		96603-BD				
Radiation test sites		Semi Anechoic Room				
Use	Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
☐	Millimeter-Wave Signal Analyzer Frequency Extension Module (60-90GHz)	VDI	N9029AV12 (SAX 409)	US54250171	Aug. 23, 2023	2 years
☐	Millimeter-Wave Signal Analyzer Frequency Extension Module (90-140GHz)	VDI	N9029AV08 (SAX 406)	US53250013	Aug. 24, 2023	2 years
☐	Millimeter-Wave Signal Analyzer Frequency Extension Module (140-220GHz)	VDI	N9029AV05 (SAX 407)	US53250020	Aug. 28, 2023	2 years
☐	Millimeter-Wave Signal Analyzer Frequency Extension Module (220-330GHz)	VDI	N9029AV03 (SAX 408)	US53250022	Aug. 28, 2023	2 years
☐	Horn Antenna (33-50GHz)	QuinStar	QWH-QPRR00	1231900027	Aug. 21, 2023	2 years
☐	Std Gain Horn Antenna Std Gain (50-75GHz)	VDI	N9029AH15 (WR15)	WR15-01	Aug. 22, 2023	2 years
☐	Std Gain Horn Antenna Std Gain (60-90GHz)	VDI	N9029AH12 (WR12)	WR12-01	Aug. 22, 2023	2 years
☐	Std Gain Horn Antenna Std Gain (90-140GHz)	VDI	N9029AH08 (WR8.0)	WR08-01	Aug. 22, 2023	2 years
☐	Std Gain Horn Antenna Std Gain (140-220GHz)	VDI	N9029AH05 (WR5.0)	WR05-01	Aug. 28, 2023	2 years
☐	Std Gain Horn Antenna Std Gain (220-325GHz)	VDI	N9029AH03 (WR3.4)	WR3.4-01	Aug. 28, 2023	2 years
☒	Software	R_RAN	1.4	N/A	N.C.R.	---
☐	Software	EZ EMC	1.1.4.4	N/A	N.C.R.	---

☒ means with testing used ;

☐ means without testing used

Note: N.C.R. = No Calibration Request.

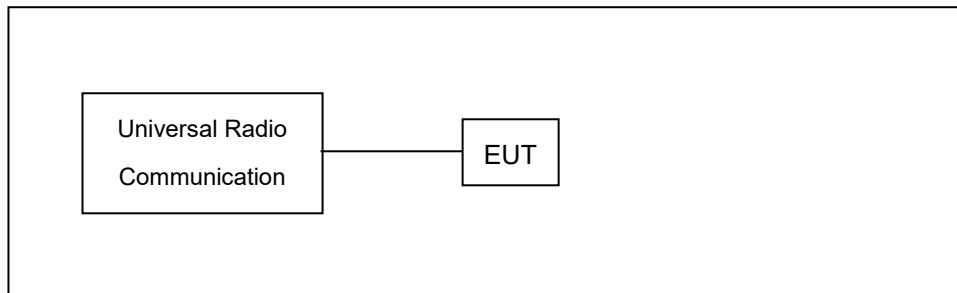
3 Measurement Procedure

3.1. RF Output Power Test

■ Limit

N/A

■ Test Setup



■ Test Procedure

- a. The EUT was set up for the maximum power with simulator.
- b. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

3.2. Effective Radiated Power / Equivalent Isotropic Radiated Power Test

■ Limit

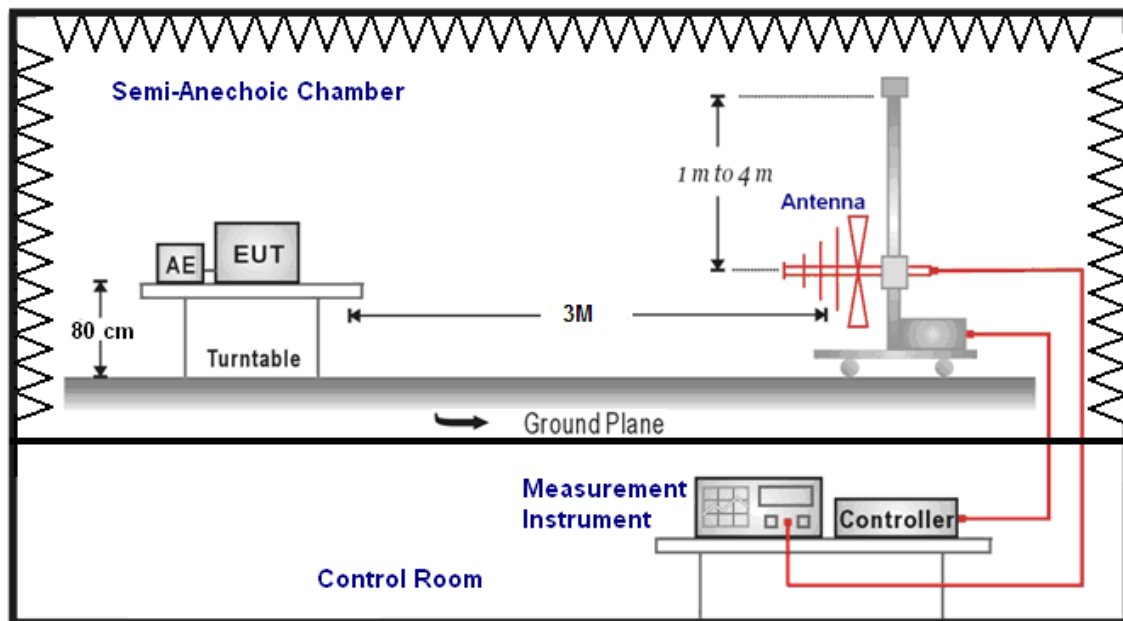
Part 22.913(a)(5): The E.R.P. of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

Part 24.232(c): The E.I.R.P. of Mobile and portable stations test transmitters must not exceed 2 Watts.

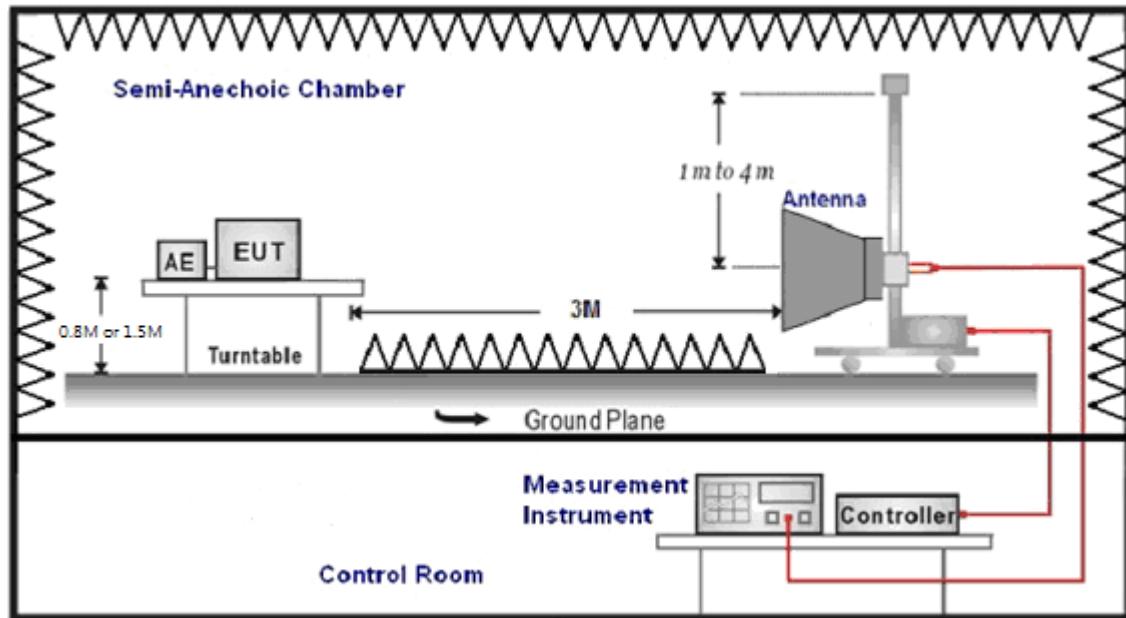
Part 27.50(d)(4): The EIRP of Mobile and portable stations transmitters are limited to 1 watt for 1710~1755 MHz.

■ Setup

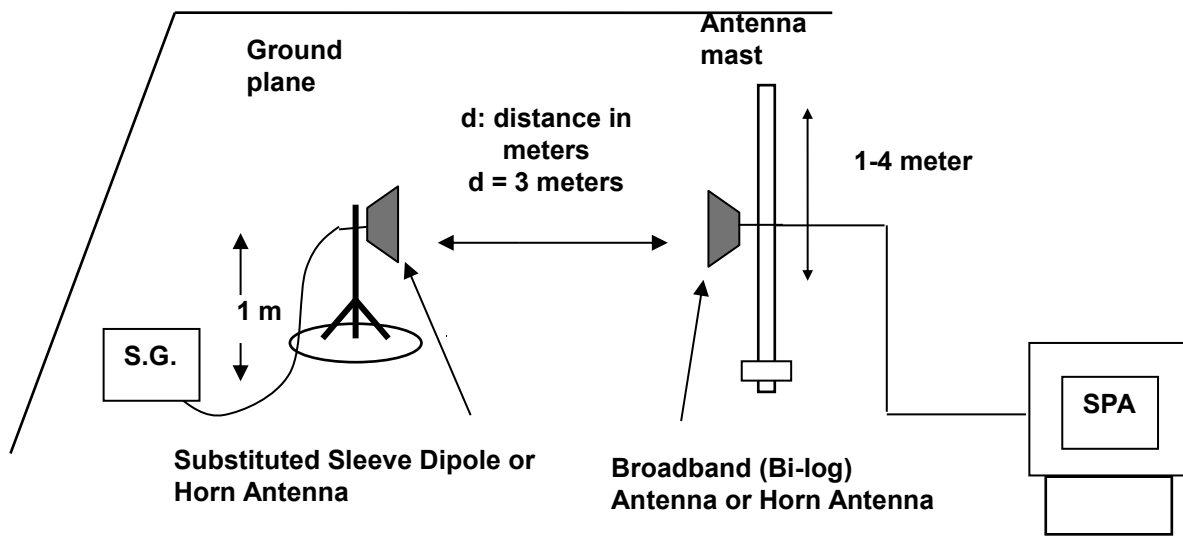
Below 1 GHz



Above 1 GHz



For Substituted Method Test Set-UP



■ Test Procedure

- a. The EUT was set up for the maximum power with WWAN link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range).
- b. E.I.R.P power measurement. In the semi-anechoic chamber, EUT placed on the 0.8 m (1.5 m for above 1 GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- c. The substitution antenna (Note:1 & 2) is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G.
- d. $E.I.R.P. = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$
- e. $E.R.P. = E.I.R.P. - 2.15 \text{ dB}$

Note: 1. Below 1 GHz Substituted Method Test : Sleeve dipole antenna to Bi-Log Antenna

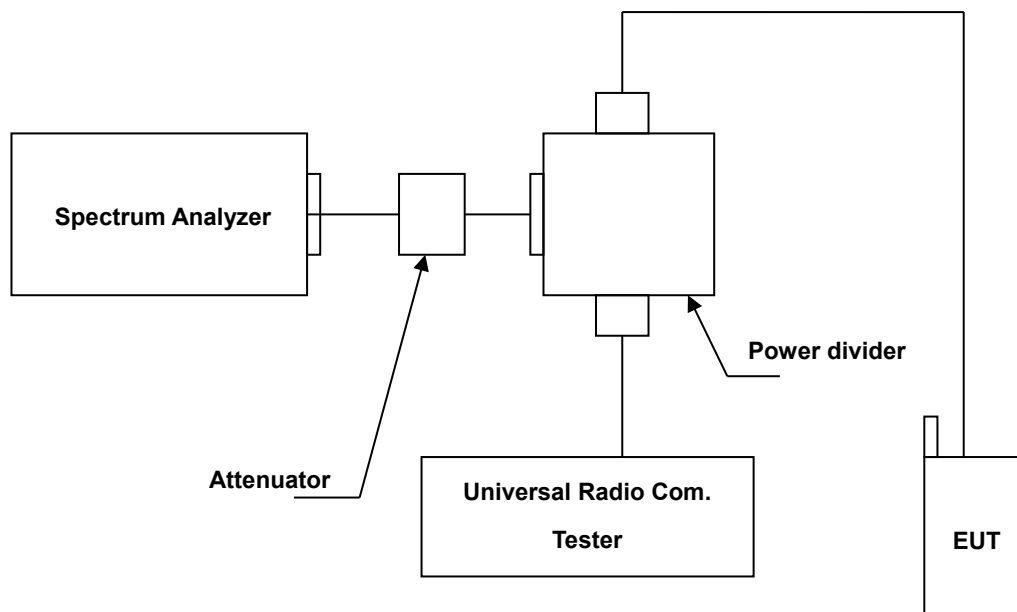
2. Above 1 GHz Substituted Method Test : Horn antenna to Horn Antenna

3.3. Peak to Average Power Ratio Test

■ Limit

In measuring transmissions in this band using an average power technique, the peak to-average power ratio (PAPR) of the transmission may not exceed 13 dB.

■ Setup



■ Test Procedure

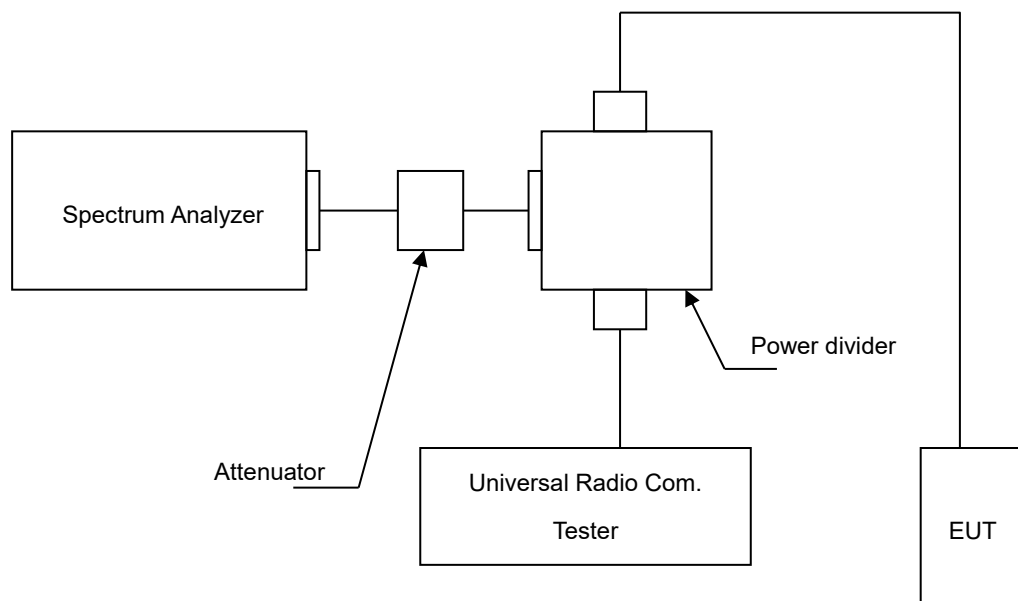
- Set resolution/measurement bandwidth signal's occupied bandwidth;
- Set the number of counts to a value that stabilizes the measured CCDF curve;
- Record the maximum PAPR level associated with a probability of 0.1 %.

3.4. Emission Bandwidth & Occupied Bandwidth Test

■ Limit

The Occupied Bandwidth Limit:
N/A.

■ Setup



■ Test Procedure

1. The EUT was connected to Spectrum Analyzer and Base Station via Power Divider.
2. The occupied bandwidth of middle channel for the highest and lowest RF powers was measured.

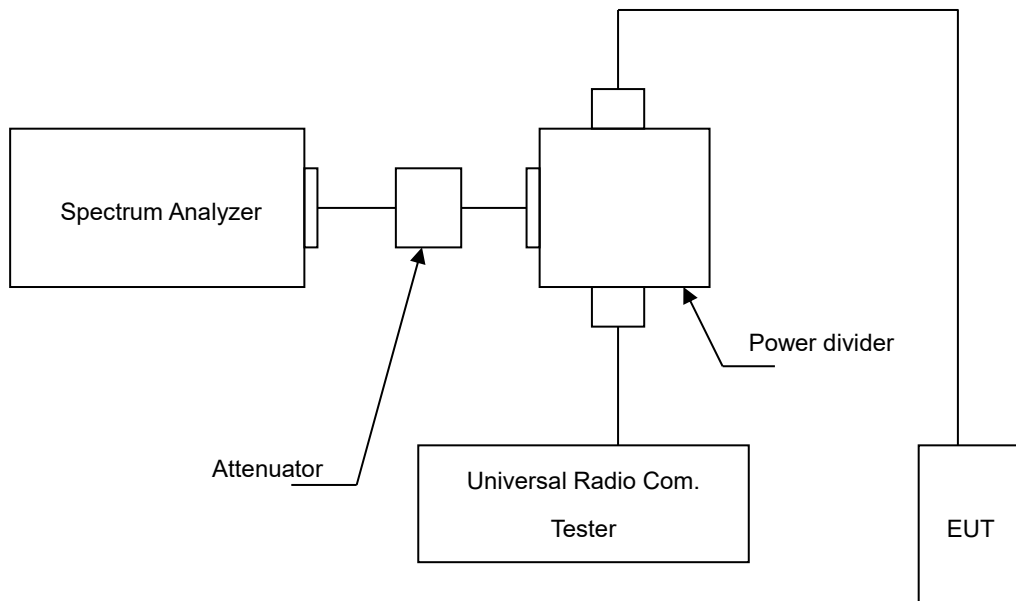
3.5. Band Edge Test

■ Limit

The Band Edge Limit:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

■ Setup



■ Test Procedure

1. The EUT was connected to Spectrum Analyzer and Base Station via Power Divider.
2. The band edge of low and high channels for the highest RF powers within the transmitting frequency band were measured.

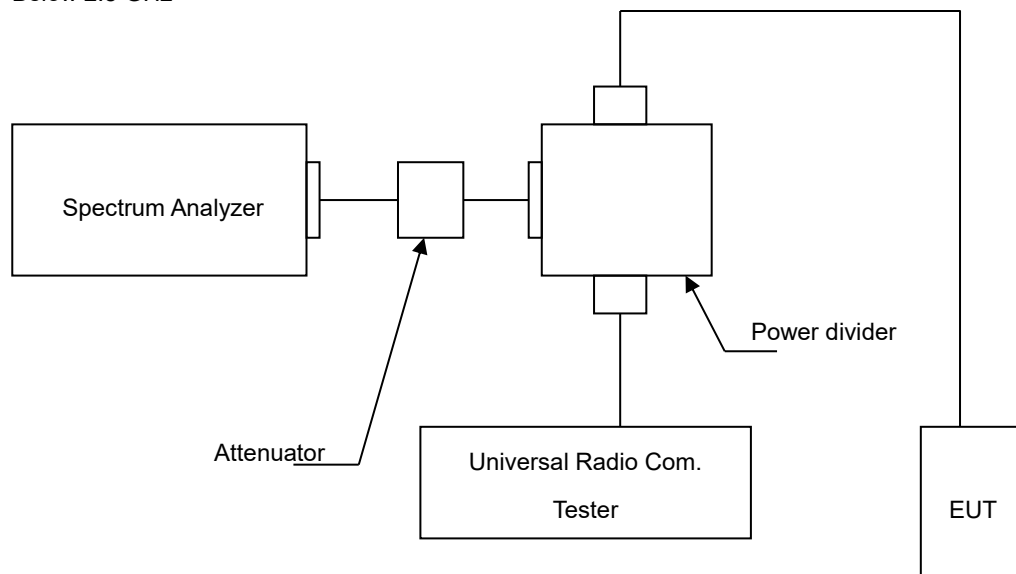
3.6. Conducted Spurious Emission Test

■ Limit

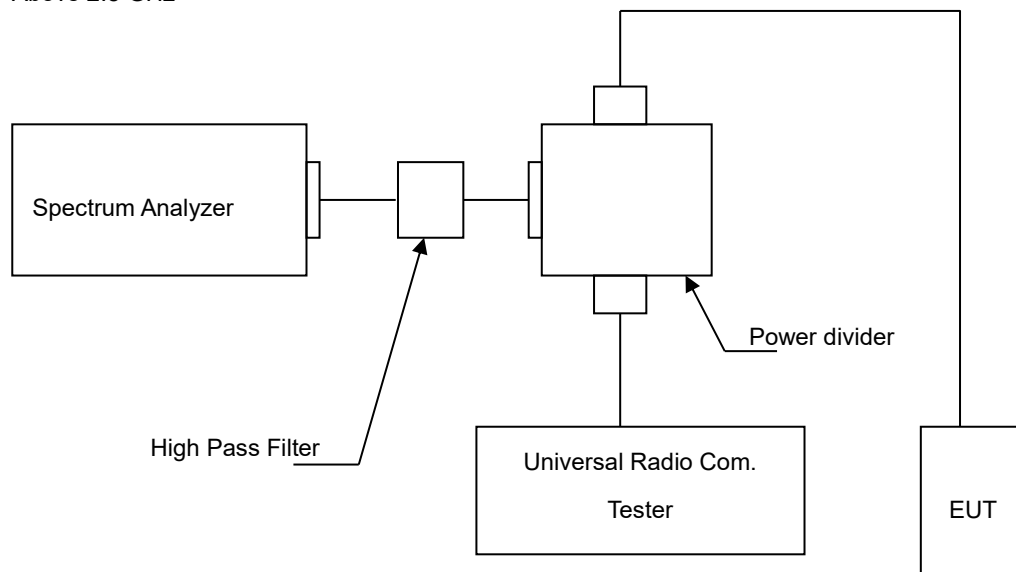
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

■ Setup

Below 2.8 GHz



Above 2.8 GHz



■ Test Procedure

1. The EUT was connected to Spectrum Analyzer and Base Station via Power Divider.
2. The middle channel for the highest RF power within the transmitting frequency was measured.
3. The conducted spurious emission for the whole frequency range was taken.
4. Test setting at WCDMA RB=1 MHz, VB=3 MHz.

3.7. Field Strength of Spurious Radiation Test

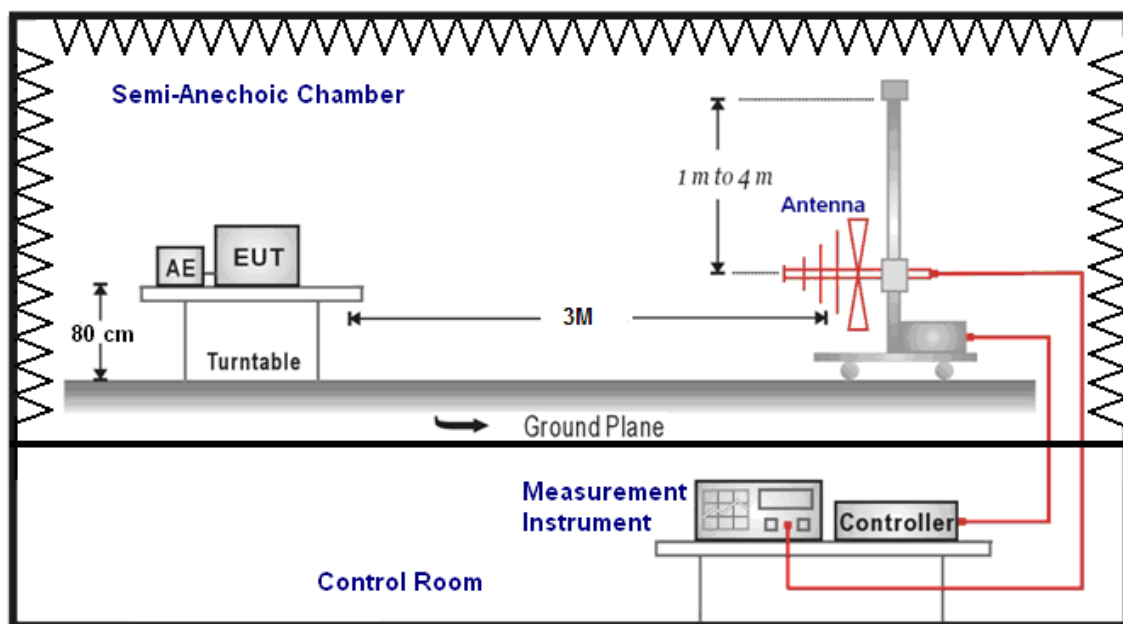
■ Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

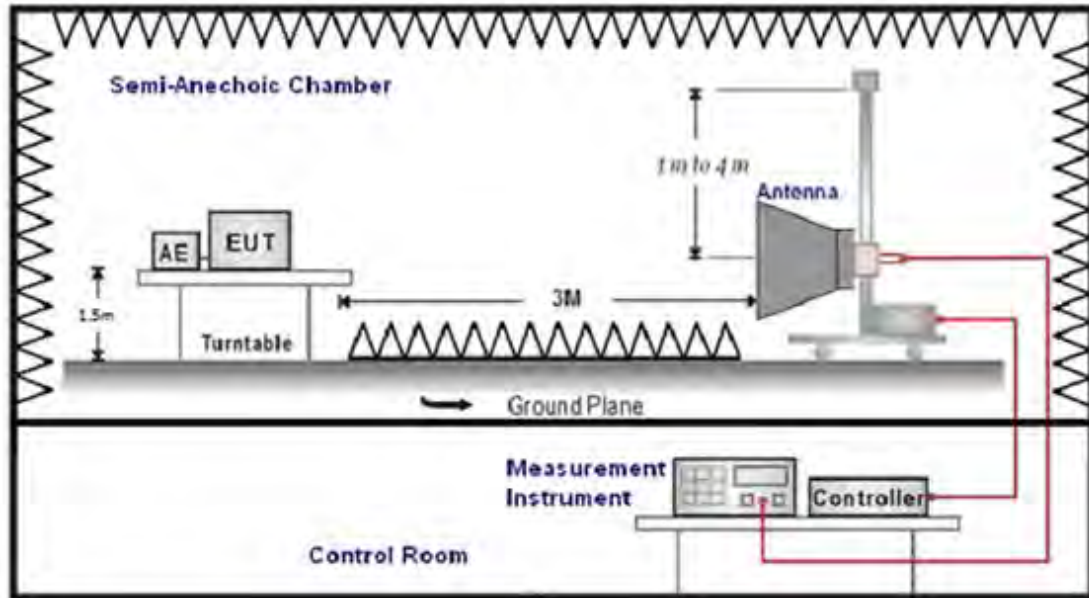
It is measured by means of a calibrated spectrum analyzer and scanned from 9 kHz up to a frequency including its 10th harmonic.

■ Setup

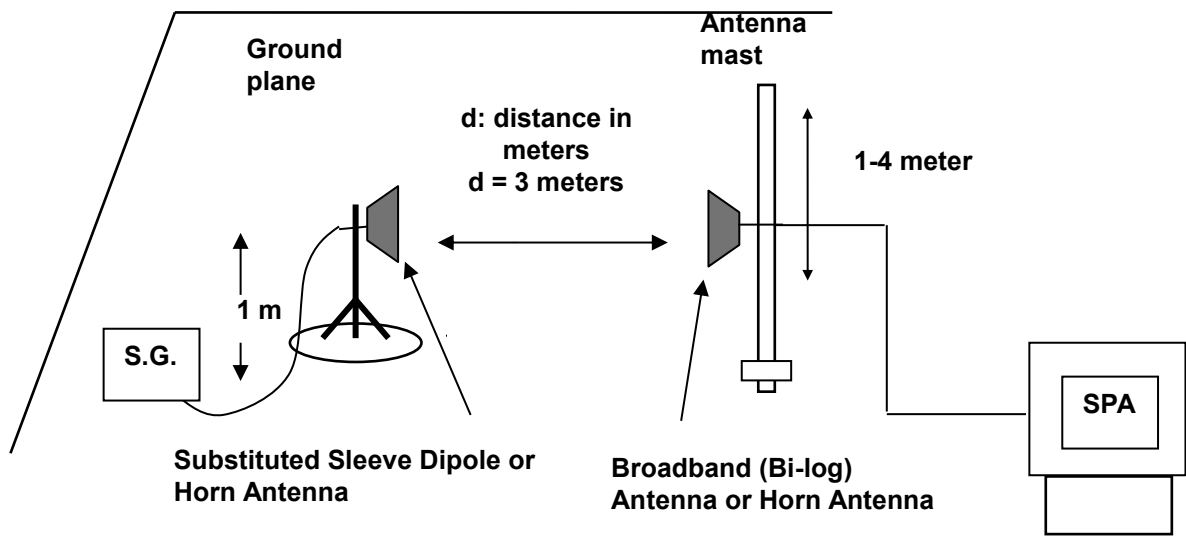
Below 1 GHz



Above 1 GHz



For Substituted Method Test Set-UP



■ Test Procedure

- a. The EUT was set up for the maximum power with WWAN link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range).
- b. E.I.R.P power measurement. In the semi-anechoic chamber, EUT placed on the 0.8 m (1.5 m for above 1 GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- c. The substitution antenna (Note:1 & 2) is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G.
- d. E.I.R.P. = Output power level of S.G - TX cable loss + Antenna gain of substitution horn
- e. E.R.P. = E.I.R.P.- 2.15 dB
- f. Measurement range 9 kHz - 10 th Harmonic

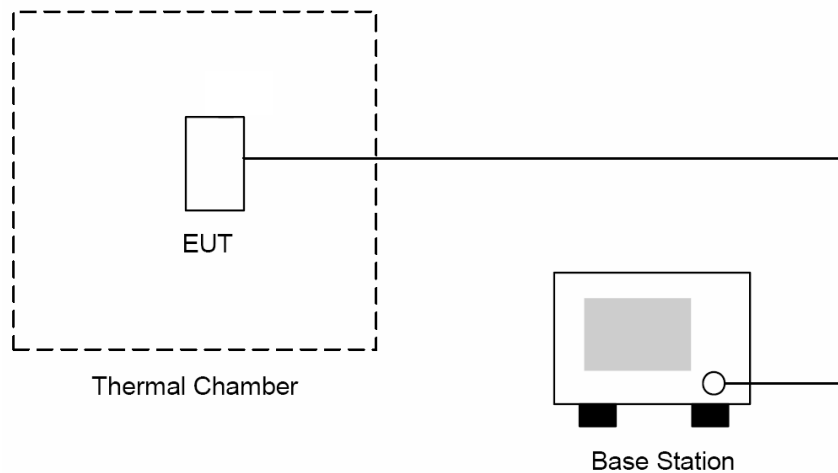
Note: 1. Below 1 GHz Substituted Method Test : Sleeve dipole antenna to Bi-Log Antenna
2. Above 1 GHz Substituted Method Test : Horn antenna to Horn Antenna

3.8. Frequency Stability (Temperature & Voltage Variation) Test

■ Limit

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ (± 2.5 ppm) of the center frequency.

■ Setup



■ Test Procedure

1. The EUT and test equipment were set up as shown on the following section.
2. With all power removed, the temperature was decreased to $-30\text{ }^{\circ}\text{C}$ and permitted to stabilize for three hours. Power was applied and the maximum change in frequency was noted within one minute.
3. With power OFF, the temperature was raised in $10\text{ }^{\circ}\text{C}$ steps. The sample was permitted to stabilize at each step for at least one-half hour. Power was applied and the maximum frequency change was noted within one minute.
4. The EUT was placed in a temperature chamber at $25 \pm 5\text{ }^{\circ}\text{C}$ and connected as the following section.
5. The power supply voltage to the EUT was varied from BEP to 115 % of the nominal value measured at the input to the EUT.
6. The temperature tests were performed for the worst case.
7. Test data was recorded.

4 Test Results

4.1. Effective Radiated Power / Equivalent Isotropic Radiated Power

Band	Modulation	Date Rate or Sub-test	CH		Frequency	Avg Conducted power (dBm)	Peak Conducted power (dBm)	Antenna Gain(dBi)	EIRP(dBm)	EIRP(W)		
WCDMA II	RMC12.2K	---	Lowest	9262	1852.4	25.13	28.34	2.44	27.57	0.571		
			Middle	9400	1880.0	25.05	28.26		27.49	0.561		
			Highest	9538	1907.6	25.02	28.29		27.46	0.557		
HSDPA II	QPSK	1	Lowest	9262	1852.4	24.28	27.72		26.72	0.470		
			Middle	9400	1880.0	24.31	27.56		26.75	0.473		
			Highest	9538	1907.6	24.22	27.69		26.66	0.463		
		2	Lowest	9262	1852.4	24.13	27.46		26.57	0.454		
			Middle	9400	1880.0	24.16	27.59		26.60	0.457		
			Highest	9538	1907.6	24.06	27.32		26.50	0.447		
		3	Lowest	9262	1852.4	23.72	27.10		26.16	0.413		
			Middle	9400	1880.0	23.82	27.08		26.26	0.423		
			Highest	9538	1907.6	23.63	26.99		26.07	0.405		
		4	Lowest	9262	1852.4	23.69	27.07		26.13	0.410		
			Middle	9400	1880.0	23.69	26.98		26.13	0.410		
			Highest	9538	1907.6	23.62	27.07		26.06	0.404		
		HSUPA II	QPSK	1	Lowest	9262	1852.4		23.60	26.96	26.04	0.402
					Middle	9400	1880.0		23.48	26.73	25.92	0.391
					Highest	9538	1907.6		23.47	26.93	25.91	0.390
				2	Lowest	9262	1852.4		21.61	24.79	24.05	0.254
					Middle	9400	1880.0		21.49	24.60	23.93	0.247
					Highest	9538	1907.6		21.53	24.97	23.97	0.249
3	Lowest			9262	1852.4	22.19	25.59		24.63	0.290		
	Middle			9400	1880.0	22.22	25.53		24.66	0.292		
	Highest			9538	1907.6	22.26	25.62		24.70	0.295		
4	Lowest			9262	1852.4	21.53	24.72		23.97	0.249		
	Middle			9400	1880.0	21.34	24.75		23.78	0.239		
	Highest			9538	1907.6	21.40	24.92		23.84	0.242		
5	Lowest			9262	1852.4	23.41	26.64		25.85	0.385		
	Middle			9400	1880.0	23.26	26.53		25.70	0.372		
	Highest			9538	1907.6	23.26	26.46		25.70	0.372		

Band	Modulation	Date Rate or Sub-test	CH		Frequency	Avg Conducted power (dBm)	Peak Conducted power (dBm)	Antenna Gain(dBi)	EIRP(dBm)	EIRP(W)		
WCDMA IV	RMC12.2K	---	Lowest	9262	1852.4	24.89	28.17	2.97	27.33	0.541		
			Middle	9400	1880.0	25.00	28.33		27.44	0.555		
			Highest	9538	1907.6	24.97	28.20		27.41	0.551		
HSDPA IV	QPSK	1	Lowest	9262	1852.4	24.05	27.40		26.49	0.446		
			Middle	9400	1880.0	24.19	27.56		26.63	0.460		
			Highest	9538	1907.6	24.19	27.53		26.63	0.460		
		2	Lowest	9262	1852.4	23.90	27.25		26.34	0.431		
			Middle	9400	1880.0	24.02	27.47		26.46	0.443		
			Highest	9538	1907.6	23.96	27.34		26.40	0.437		
		3	Lowest	9262	1852.4	23.44	26.86		25.88	0.387		
			Middle	9400	1880.0	23.63	26.97		26.07	0.405		
			Highest	9538	1907.6	23.74	27.16		26.18	0.415		
		4	Lowest	9262	1852.4	23.50	26.88		25.94	0.393		
			Middle	9400	1880.0	23.66	26.94		26.10	0.407		
			Highest	9538	1907.6	23.72	27.18		26.16	0.413		
		HSUPA IV	QPSK	1	Lowest	9262	1852.4		23.40	26.76	25.84	0.384
					Middle	9400	1880.0		23.51	26.74	25.95	0.394
					Highest	9538	1907.6		23.55	26.88	25.99	0.397
				2	Lowest	9262	1852.4		21.45	24.79	23.89	0.245
					Middle	9400	1880.0		21.50	24.69	23.94	0.248
					Highest	9538	1907.6		21.47	24.89	23.91	0.246
				3	Lowest	9262	1852.4		22.00	25.47	24.44	0.278
					Middle	9400	1880.0		22.25	25.55	24.69	0.294
					Highest	9538	1907.6		22.35	25.75	24.79	0.301
4	Lowest			9262	1852.4	21.37	24.59		23.81	0.240		
	Middle			9400	1880.0	21.35	24.65		23.79	0.239		
	Highest			9538	1907.6	21.49	25.01		23.93	0.247		
5	Lowest			9262	1852.4	23.15	26.52		25.59	0.362		
	Middle			9400	1880.0	23.32	26.60		25.76	0.377		
	Highest			9538	1907.6	23.40	26.58		25.84	0.384		

Band	Modulation	Date Rate or Sub- test	CH		Frequency (MHz)	Avg Conducted power (dBm)	Peak Conducted power (dBm)	Antenna Gain(dBi)	EIRP(dBm)	ERP(dBm)	ERP(W)		
WCDMA V	RMC12.2K	---	Lowest	4132	826.4	24.78	27.90	-0.80	23.98	21.83	0.152		
			Middle	4183	836.6	24.91	28.22		24.11	21.96	0.157		
			Highest	4233	846.6	24.87	28.08		24.07	21.92	0.156		
HSDPA V	QPSK	1	Lowest	4132	826.4	23.96	27.38		23.16	21.01	0.126		
			Middle	4183	836.6	24.17	27.57		23.37	21.22	0.132		
			Highest	4233	846.6	24.05	27.39		23.25	21.10	0.129		
		2	Lowest	4132	826.4	23.76	27.15		22.96	20.81	0.121		
			Middle	4183	836.6	23.96	27.33		23.16	21.01	0.126		
			Highest	4233	846.6	23.88	27.14		23.08	20.93	0.124		
		3	Lowest	4132	826.4	23.41	26.87		22.61	20.46	0.111		
			Middle	4183	836.6	23.67	27.10		22.87	20.72	0.118		
			Highest	4233	846.6	23.55	26.98		22.75	20.60	0.115		
		4	Lowest	4132	826.4	23.33	26.69		22.53	20.38	0.109		
			Middle	4183	836.6	23.57	26.84		22.77	20.62	0.115		
			Highest	4233	846.6	23.41	26.87		22.61	20.46	0.111		
		HSUPA V	QPSK	1	Lowest	4132	826.4		23.16	26.48	22.36	20.21	0.105
					Middle	4183	836.6		23.31	26.56	22.51	20.36	0.109
					Highest	4233	846.6		23.31	26.69	22.51	20.36	0.109
				2	Lowest	4132	826.4		21.19	24.54	20.39	18.24	0.067
					Middle	4183	836.6		21.37	24.51	20.57	18.42	0.070
					Highest	4233	846.6		21.42	24.81	20.62	18.47	0.070
3	Lowest			4132	826.4	21.83	25.30		21.03	18.88	0.077		
	Middle			4183	836.6	22.06	25.35		21.26	19.11	0.081		
	Highest			4233	846.6	22.08	25.52		21.28	19.13	0.082		
4	Lowest			4132	826.4	21.14	24.37		20.34	18.19	0.066		
	Middle			4183	836.6	21.16	24.63		20.36	18.21	0.066		
	Highest			4233	846.6	21.10	24.66		20.30	18.15	0.065		
5	Lowest			4132	826.4	22.92	26.30		22.12	19.97	0.099		
	Middle			4183	836.6	23.15	26.53		22.35	20.20	0.105		
	Highest			4233	846.6	23.16	26.44		22.36	20.21	0.105		

4.2. Peak to Average Power Ratio

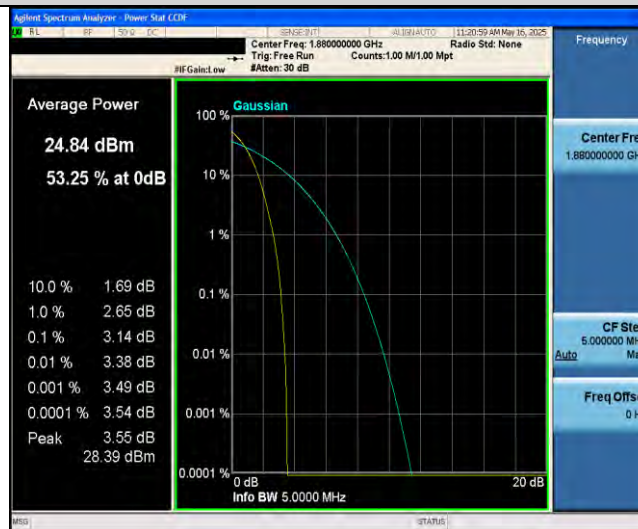
Band	Channel	Peak-to-Average Ratio(dB)	Limit(dBm)	Verdict
Band2	9262	3.09	13	PASS
Band2	9400	3.14	13	PASS
Band2	9538	3.12	13	PASS
Band4	1312	3.14	13	PASS
Band4	1413	3.02	13	PASS
Band4	1513	3.1	13	PASS
Band5	4132	3.05	13	PASS
Band5	4182	3.09	13	PASS
Band5	4233	3.08	13	PASS

Test Graphs

Band2-9262



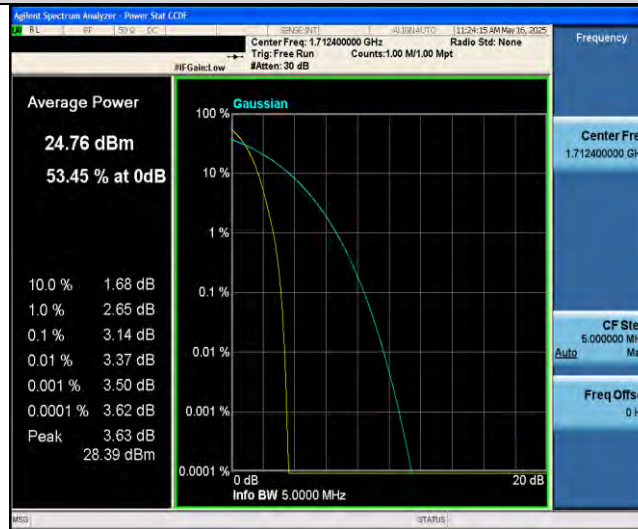
Band2-9400



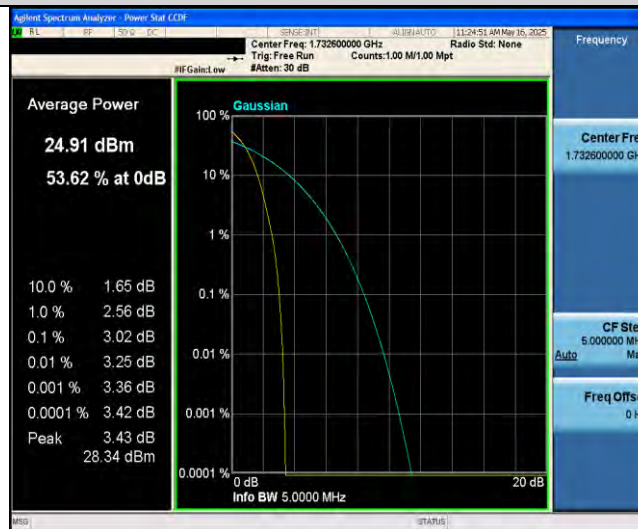
Band2-9538



Band4-1312



Band4-1413



Band4-1513



Band5-4132



Band5-4182



Band5-4233

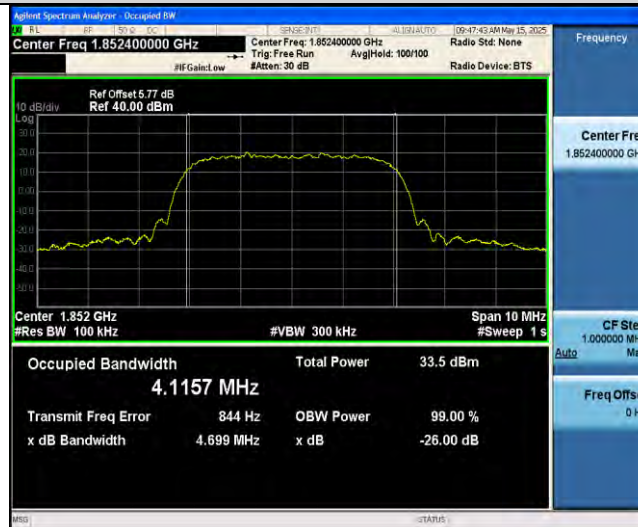


4.3. Emission Bandwidth & Occupied Bandwidth

Band	Channel	Occupied Bandwidth (kHz)	26dB Bandwidth (kHz)	Limit(kHz)	Verdict
Band2	9262	4.1157	4.699	---	PASS
Band2	9400	4.1175	4.704	---	PASS
Band2	9538	4.1144	4.695	---	PASS
Band4	1312	4.1156	4.710	---	PASS
Band4	1413	4.1194	4.715	---	PASS
Band4	1513	4.1193	4.712	---	PASS
Band5	4132	4.1225	4.715	---	PASS
Band5	4182	4.1244	4.714	---	PASS
Band5	4233	4.1243	4.710	---	PASS

Test Graphs

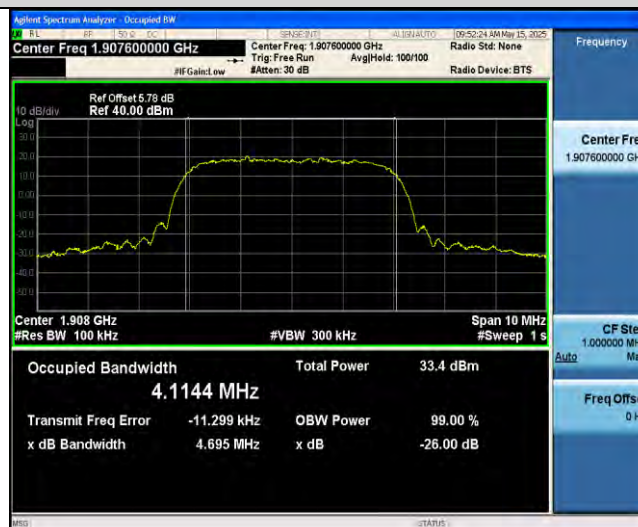
Band2-9262-4.699



Band2-9400-4.704



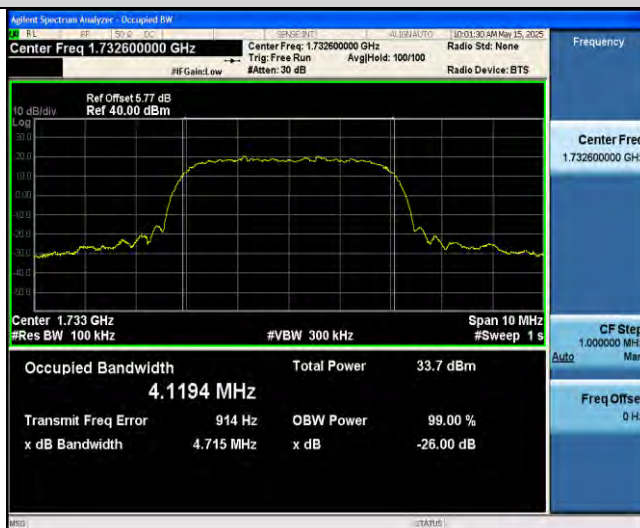
Band2-9538-4.695



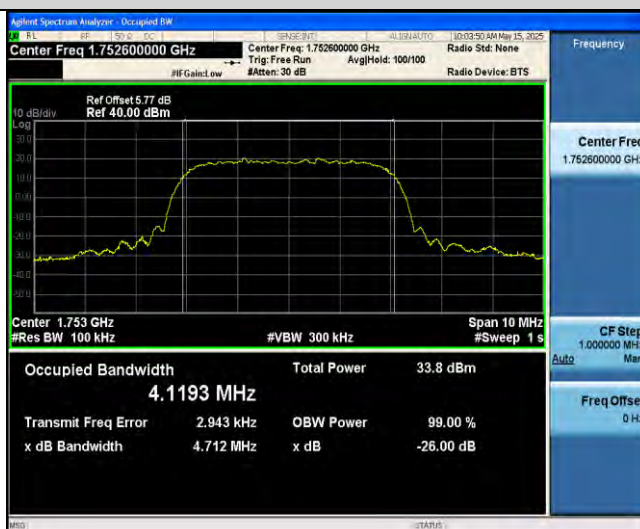
Band4-1312-4.710



Band4-1413-4.715



Band4-1513-4.712



Band5-4132-4.715



Band5-4182-4.714



Band5-4233-4.710



4.4. Band Edge Measurement

■ Test Graphs

Band2-9262



Band2-9538



Band4-1312



Band4-1513



Band5-4132



Band5-4233



4.5. Conducted Spurious Emission Test

■ Test Graphs

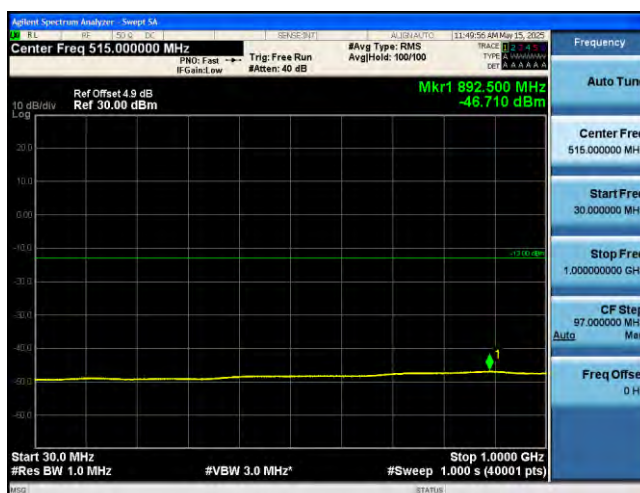
Band2-9262-0.009~0.15MHz



Band2-9262-0.15~30MHz



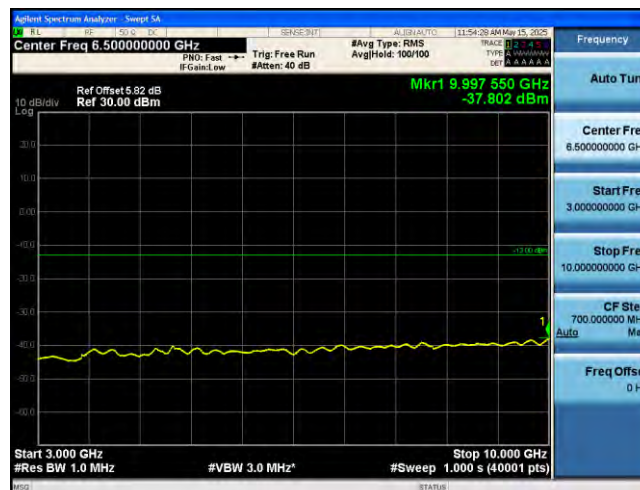
Band2-9262-30~1000MHz



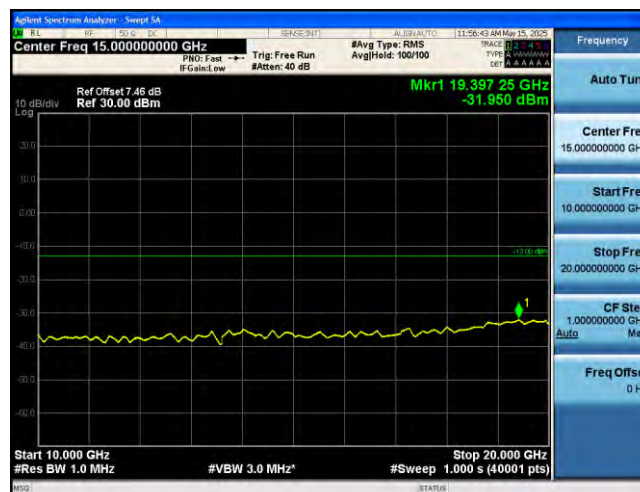
Band2-9262-1000~3000MHz



Band2-9262-3000~10000MHz



Band2-9262-10000~20000MHz



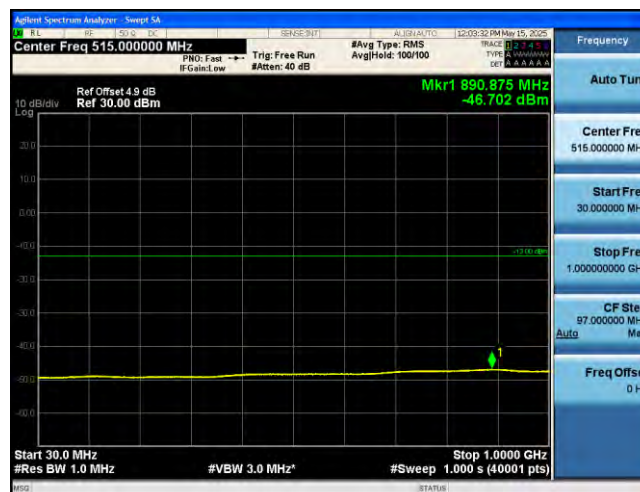
Band2-9400-0.009~0.15MHz



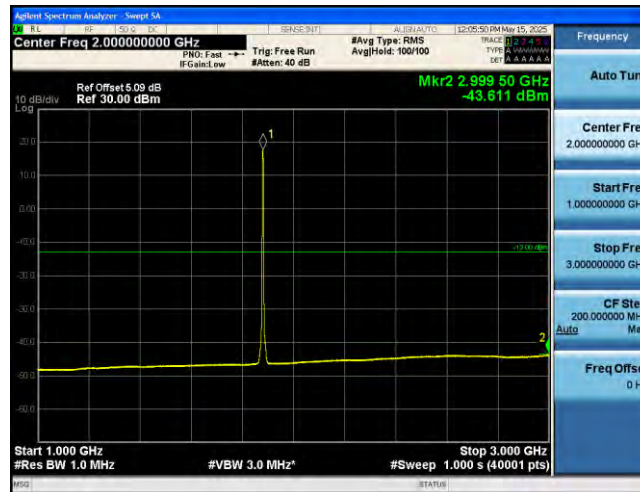
Band2-9400-0.15~30MHz



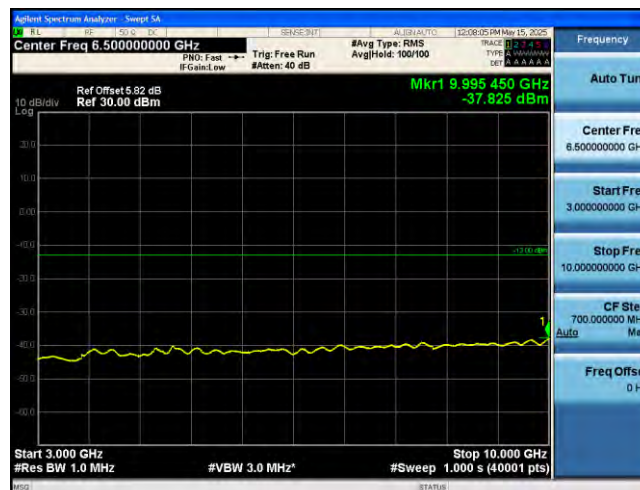
Band2-9400-30~1000MHz



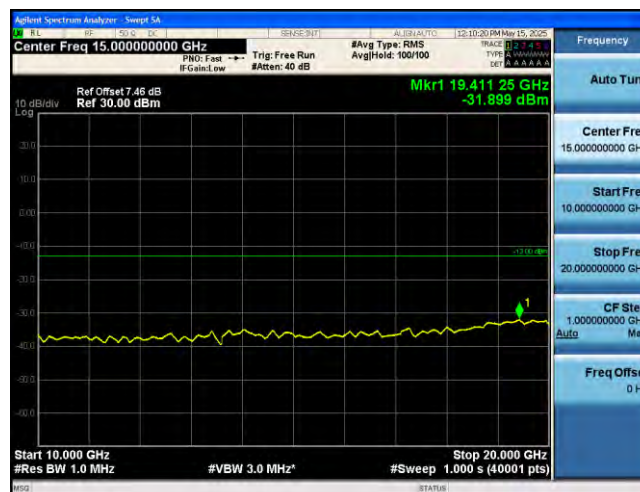
Band2-9400-1000~3000MHz



Band2-9400-3000~10000MHz



Band2-9400-10000~20000MHz



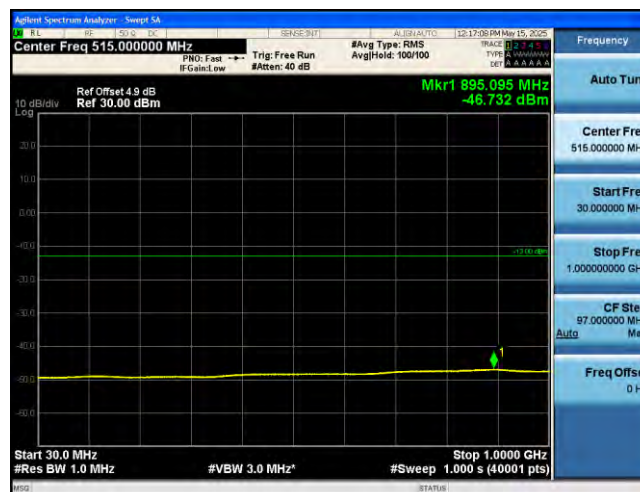
Band2-9538-0.009~0.15MHz



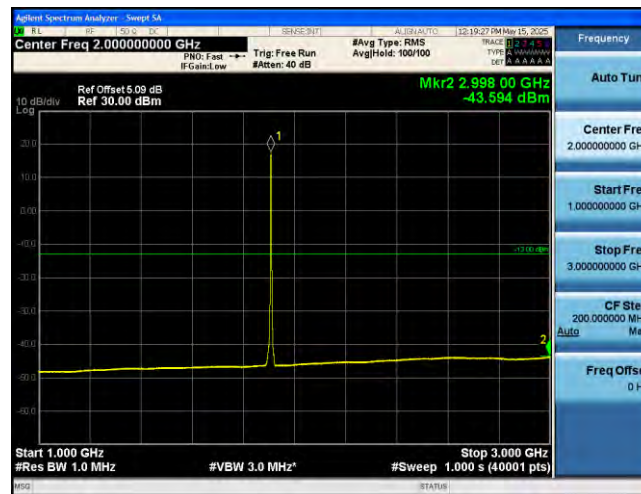
Band2-9538-0.15~30MHz



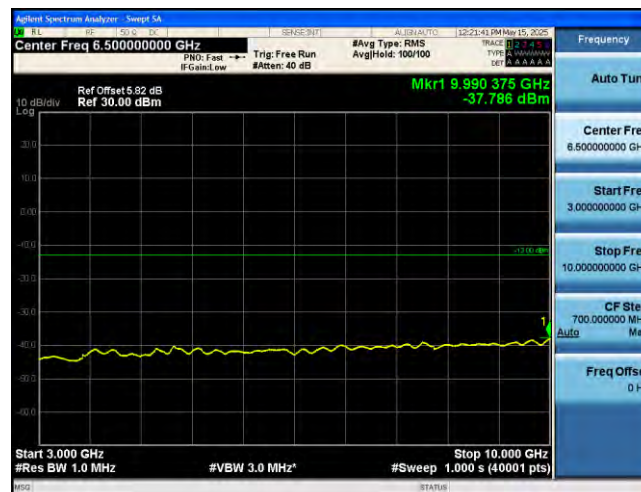
Band2-9538-30~1000MHz



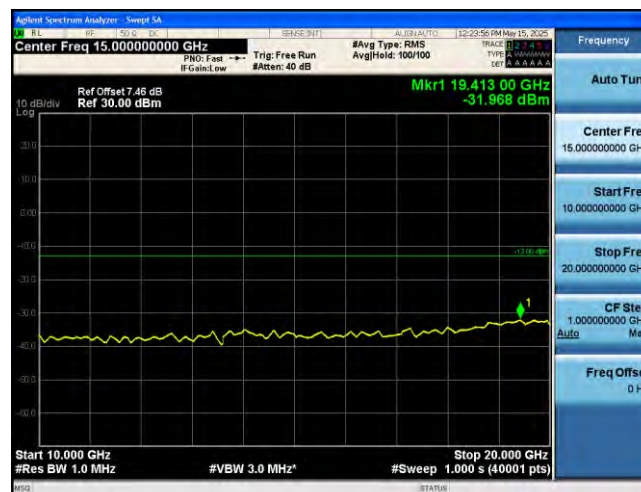
Band2-9538-1000~3000MHz



Band2-9538-3000~10000MHz



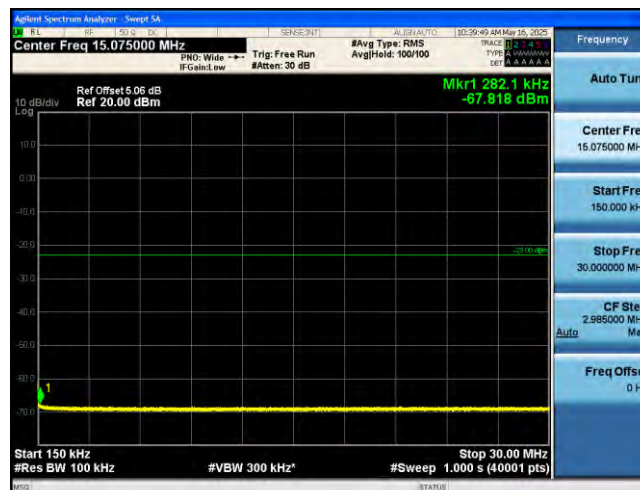
Band2-9538-10000~20000MHz



Band4-1312-0.009~0.15MHz



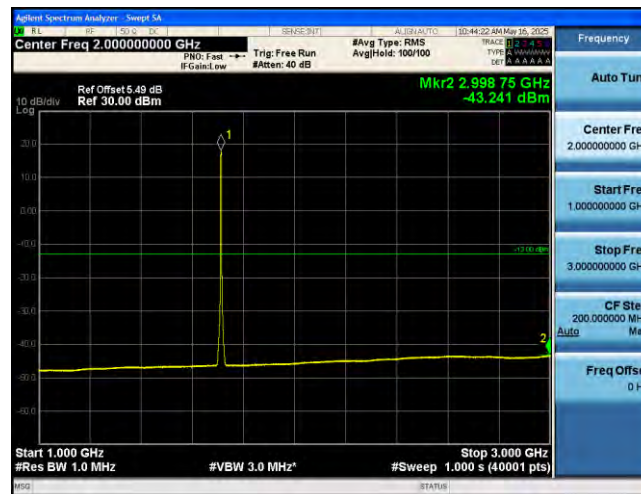
Band4-1312-0.15~30MHz



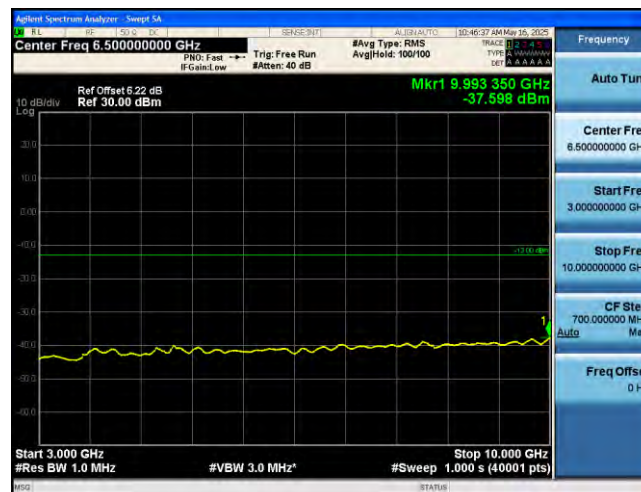
Band4-1312-30~1000MHz



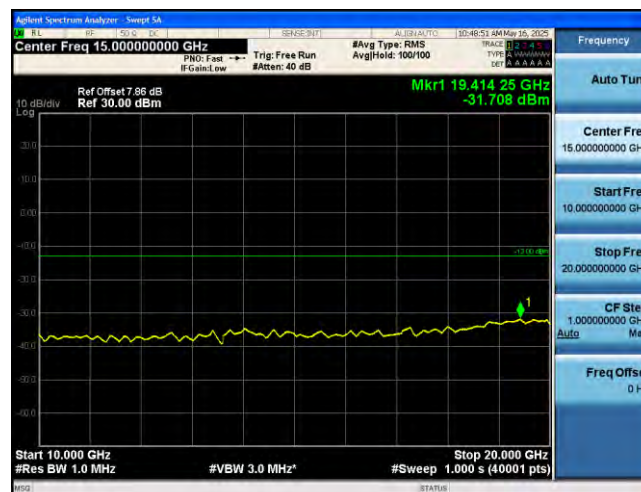
Band4-1312-1000~3000MHz



Band4-1312-3000~10000MHz



Band4-1312-10000~20000MHz



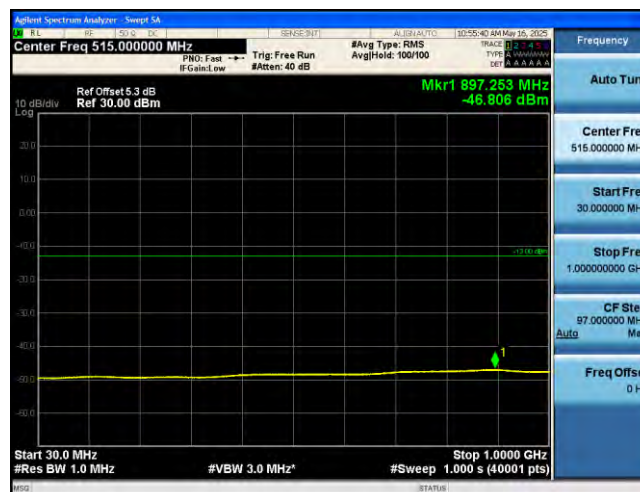
Band4-1413-0.009~0.15MHz



Band4-1413-0.15~30MHz



Band4-1413-30~1000MHz



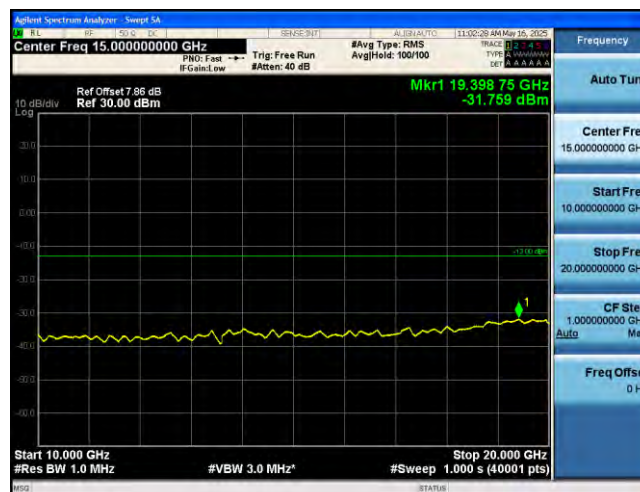
Band4-1413-1000~3000MHz



Band4-1413-3000~10000MHz



Band4-1413-10000~20000MHz



Band4-1513-0.009~0.15MHz



Band4-1513-0.15~30MHz



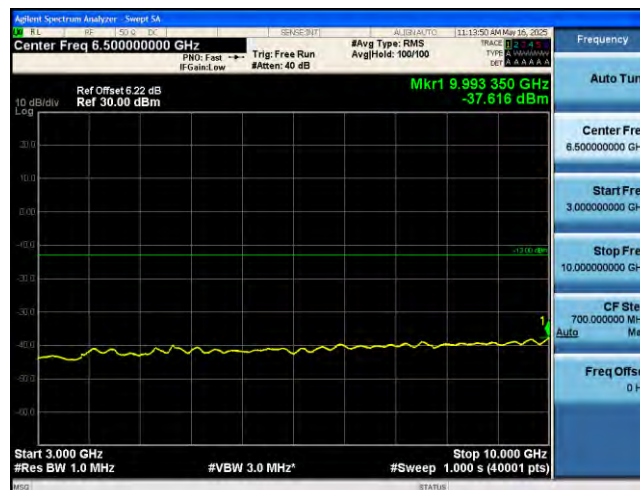
Band4-1513-30~1000MHz



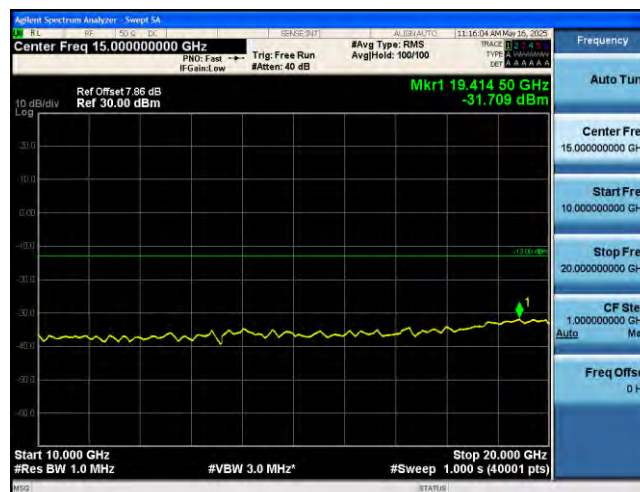
Band4-1513-1000~3000MHz



Band4-1513-3000~10000MHz



Band4-1513-10000~20000MHz



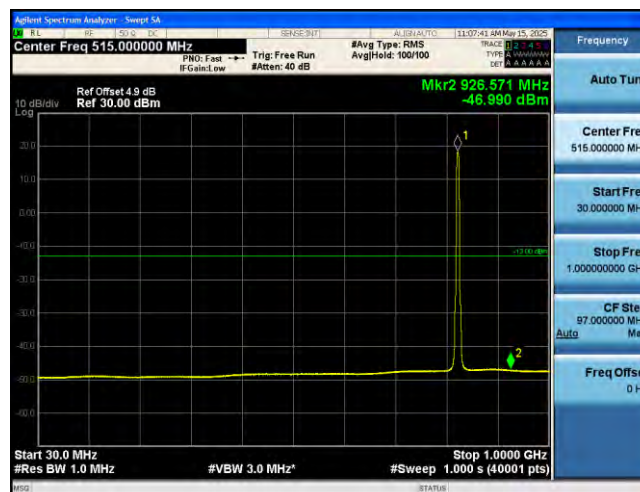
Band5-4132-0.009~0.15MHz



Band5-4132-0.15~30MHz



Band5-4132-30~1000MHz



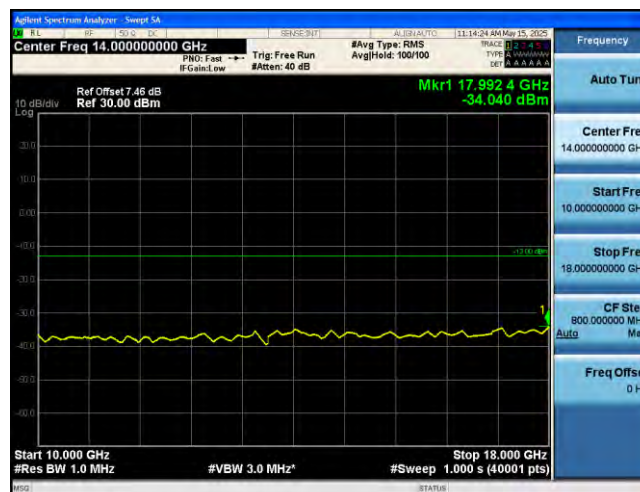
Band5-4132-1000~3000MHz



Band5-4132-3000~10000MHz



Band5-4132-10000~18000MHz



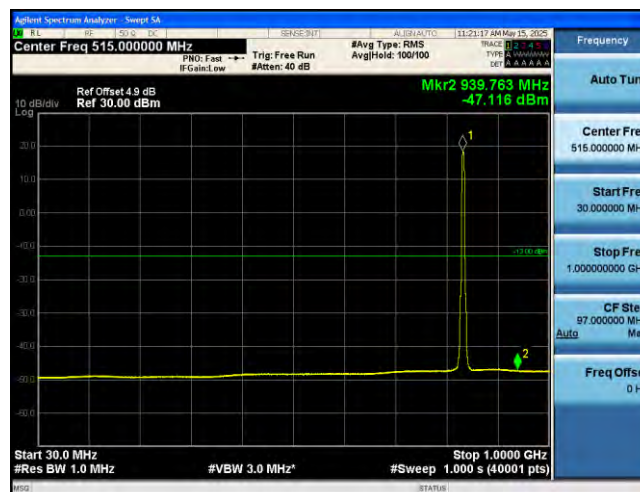
Band5-4182-0.009~0.15MHz



Band5-4182-0.15~30MHz



Band5-4182-30~1000MHz



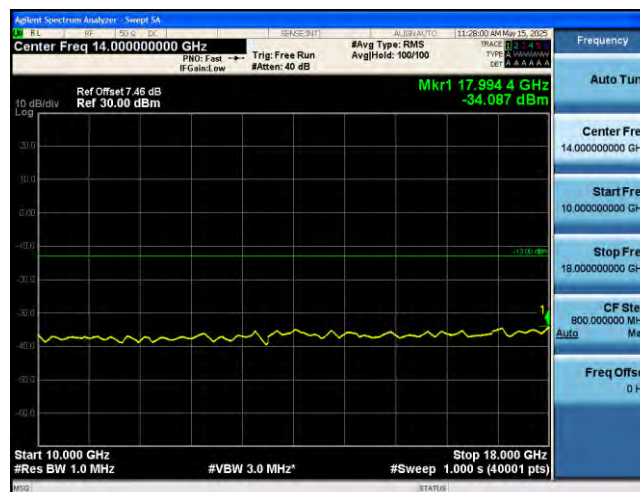
Band5-4182-1000~3000MHz



Band5-4182-3000~10000MHz



Band5-4182-10000~18000MHz



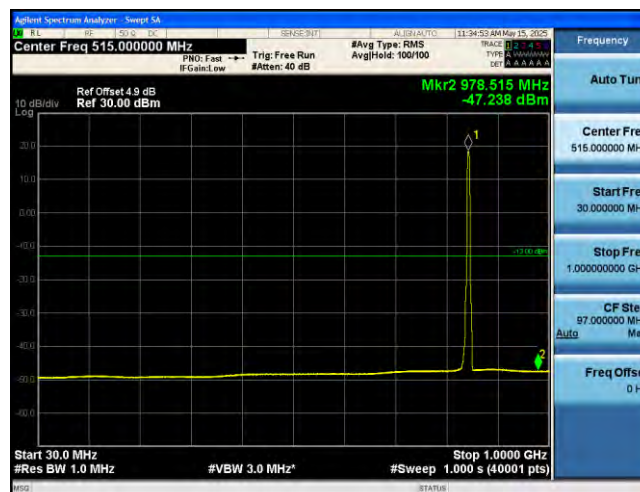
Band5-4233-0.009~0.15MHz



Band5-4233-0.15~30MHz



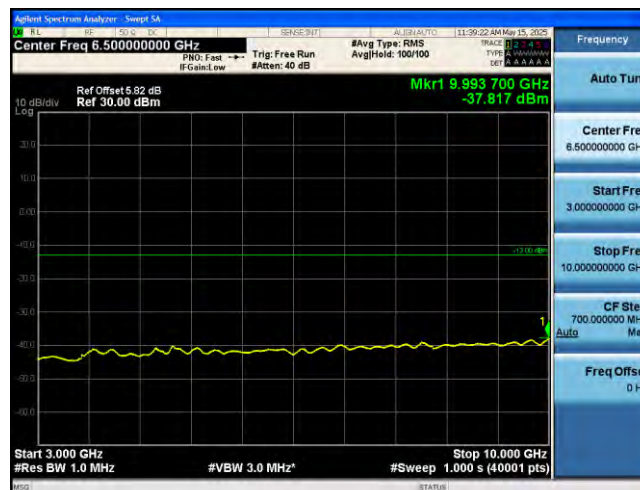
Band5-4233-30~1000MHz



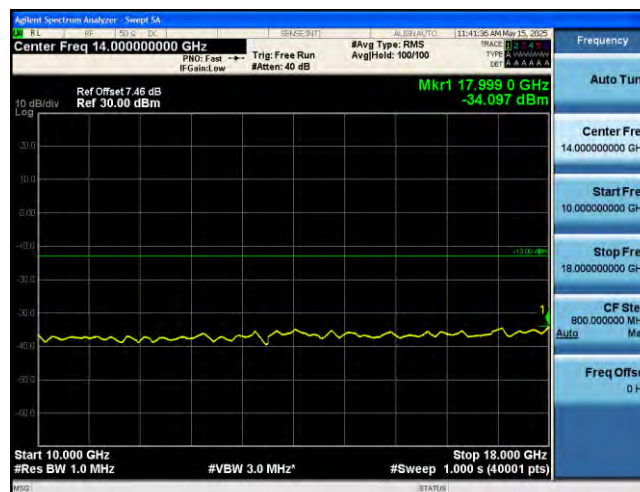
Band5-4233-1000~3000MHz



Band5-4233-3000~10000MHz

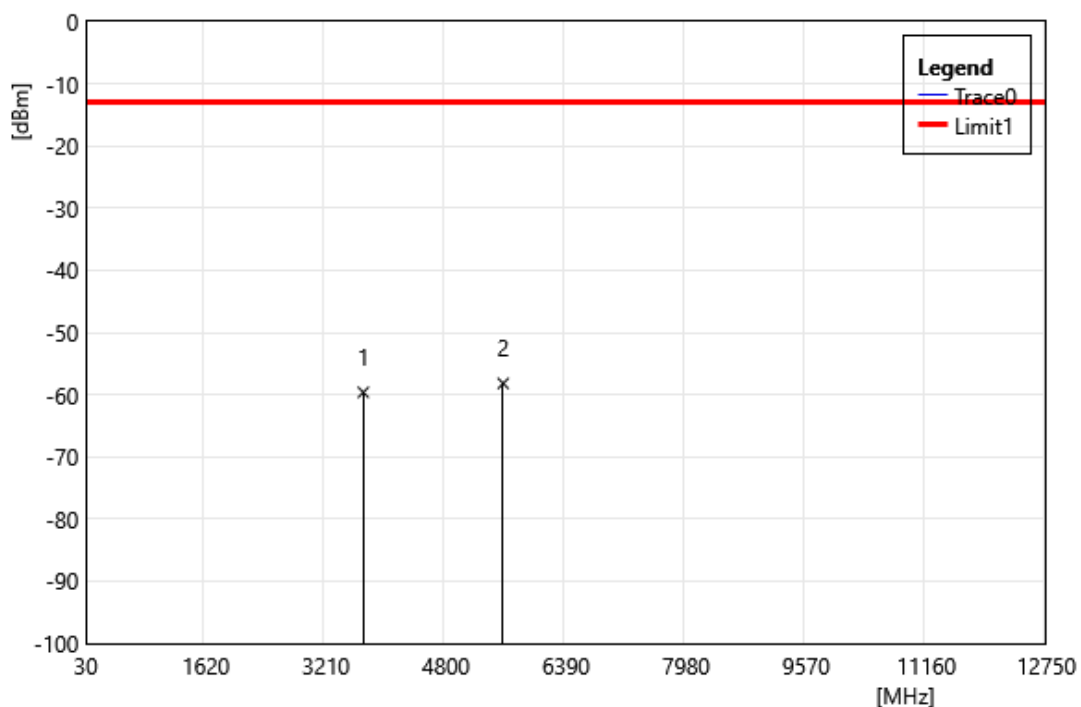


Band5-4233-10000~18000MHz



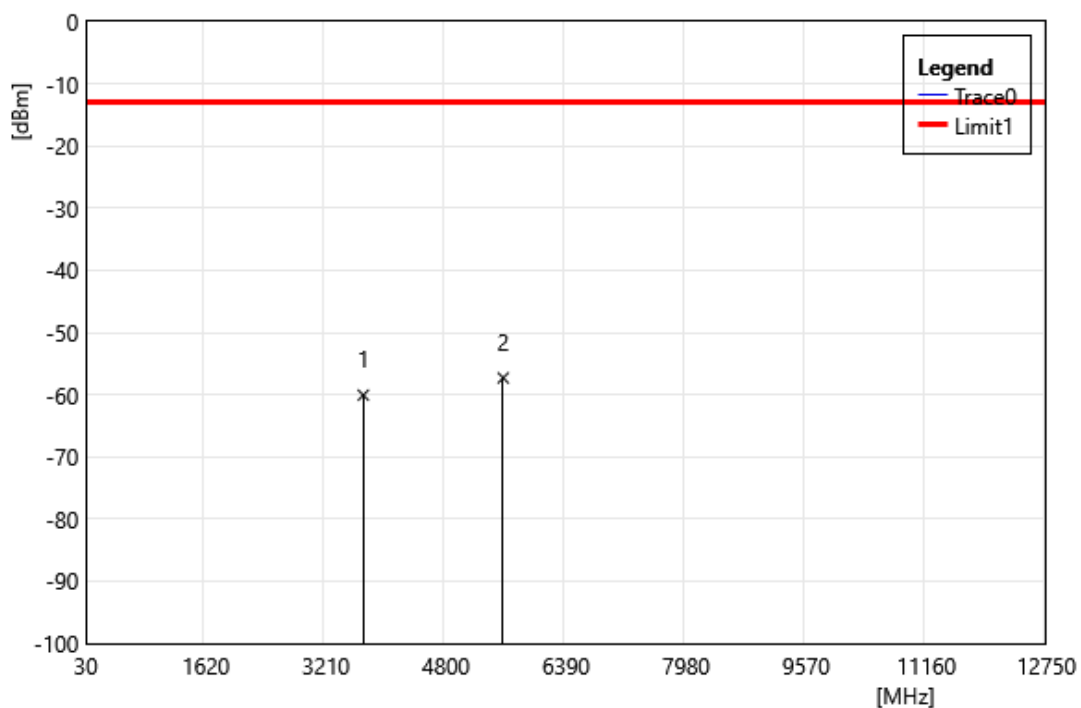
4.6. Field Strength of Spurious Radiation

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 2_CH9262		
Polarization:	Vertical		
Remark:			



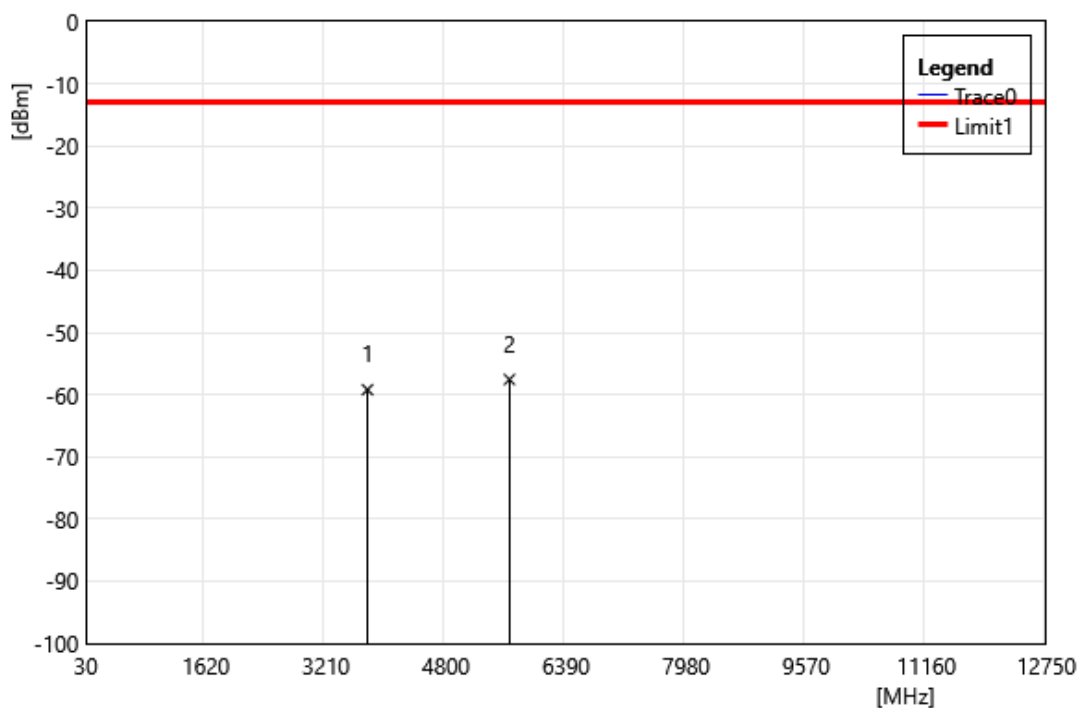
ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	3704.80	-66.47	6.85	-59.62	-13.00	-46.62	PEAK
2	5557.20	-69.62	11.44	-58.18	-13.00	-45.18	PEAK

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 2_CH9262		
Polarization:	Horizontal		
Remark:			



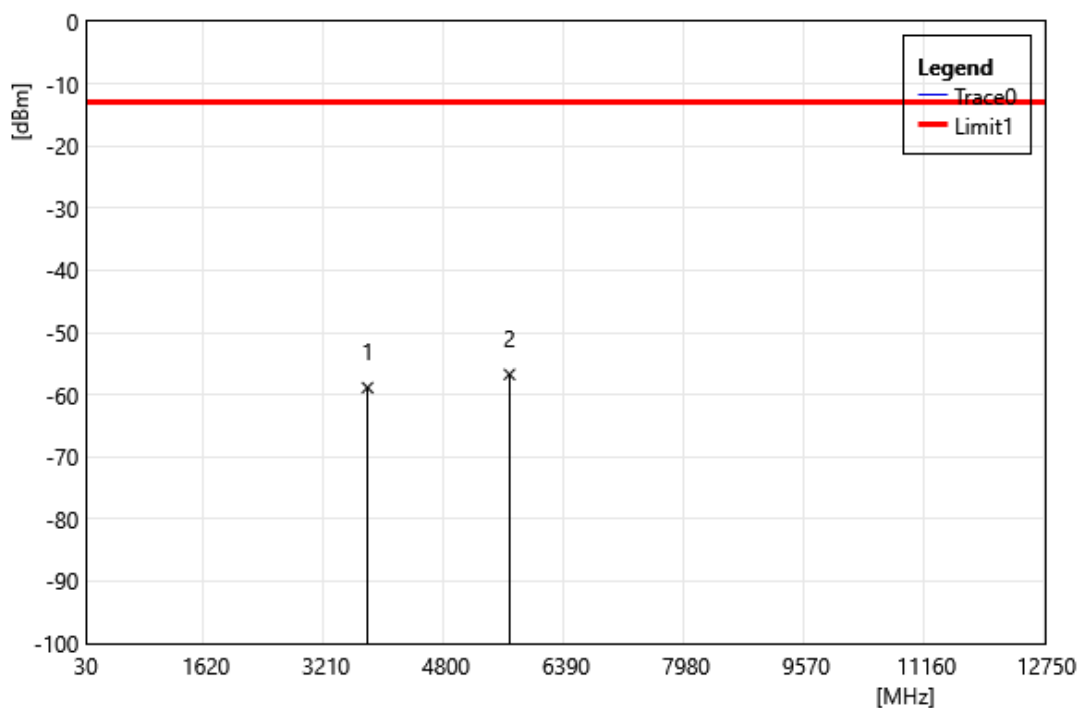
ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	3704.80	-66.91	6.85	-60.06	-13.00	-47.06	PEAK
2	5557.20	-68.74	11.44	-57.30	-13.00	-44.30	PEAK

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 2_CH9400		
Polarization:	Vertical		
Remark:			



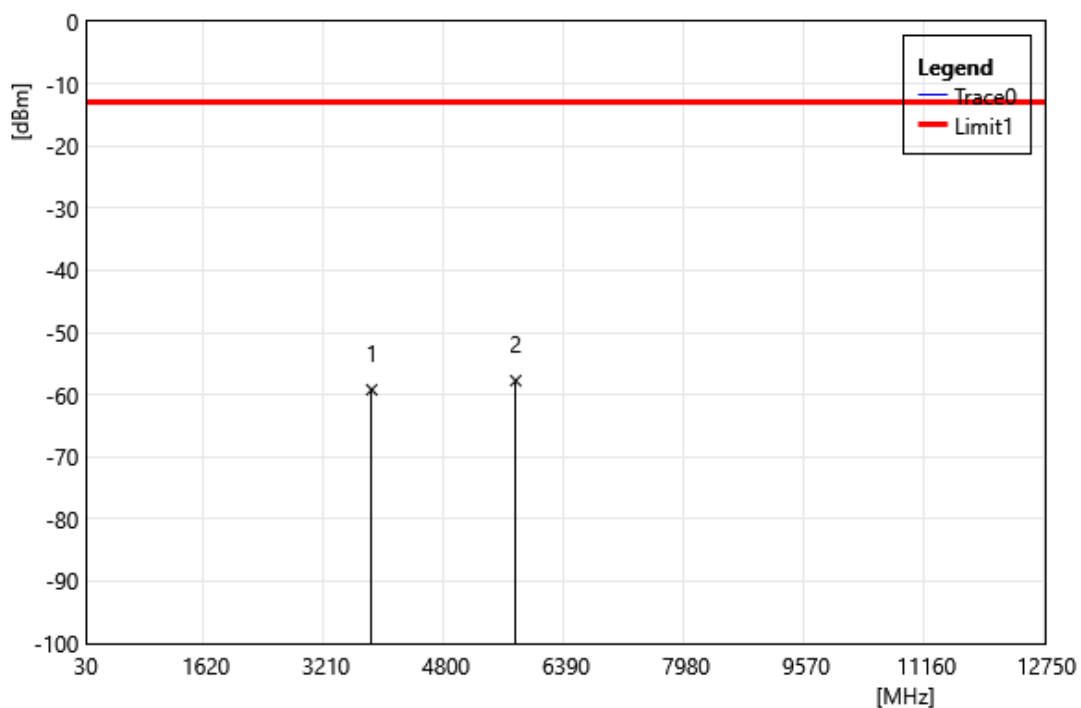
ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	3760.00	-66.20	7.01	-59.20	-13.00	-46.20	PEAK
2	5640.00	-69.17	11.62	-57.55	-13.00	-44.55	PEAK

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 2_CH9400		
Polarization:	Horizontal		
Remark:			



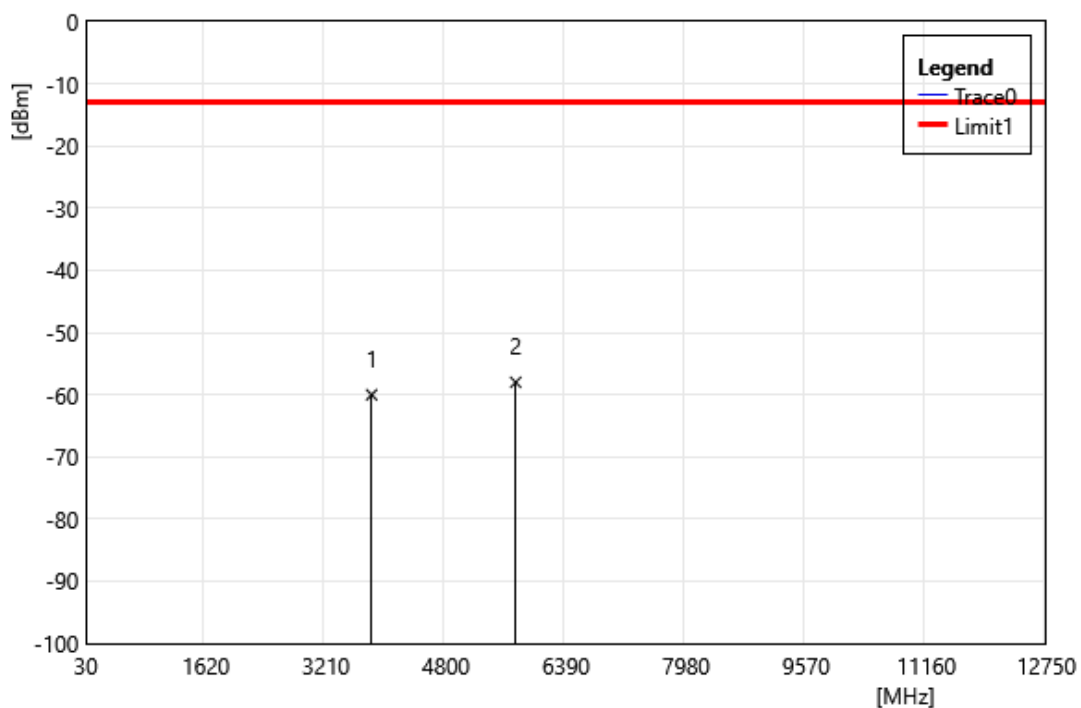
ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	3760.00	-65.87	7.01	-58.86	-13.00	-45.86	PEAK
2	5640.00	-68.36	11.62	-56.74	-13.00	-43.74	PEAK

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 2_CH9538		
Polarization:	Vertical		
Remark:			



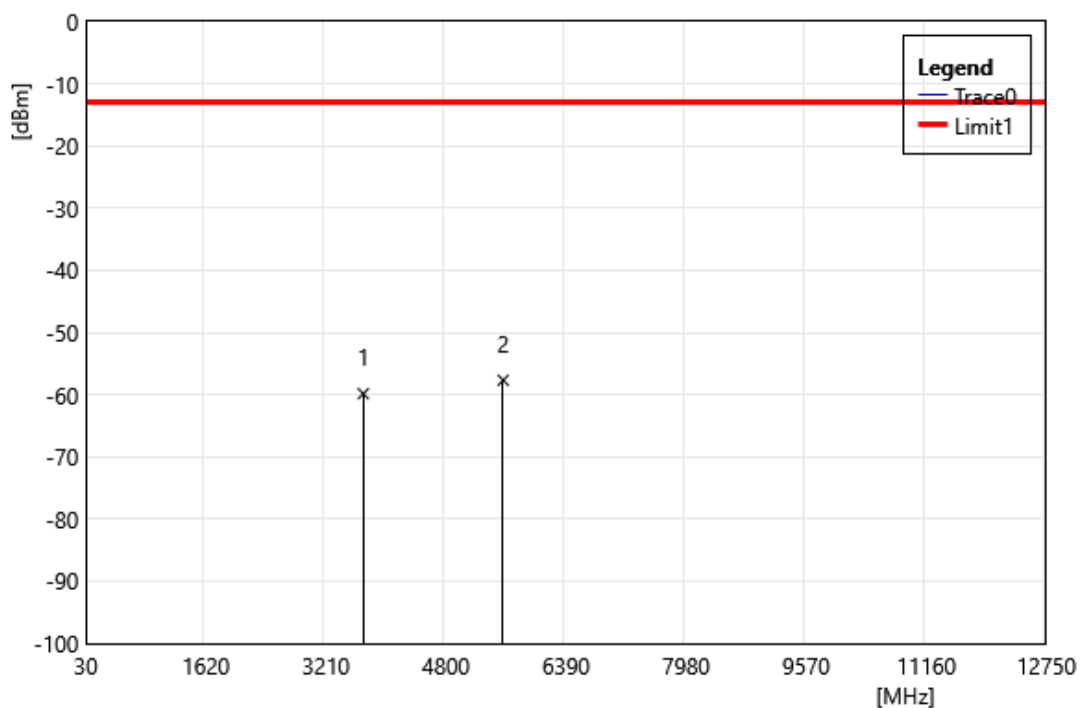
ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	3815.20	-66.38	7.17	-59.21	-13.00	-46.21	PEAK
2	5722.80	-69.54	11.79	-57.75	-13.00	-44.75	PEAK

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 2_CH9538		
Polarization:	Horizontal		
Remark:			



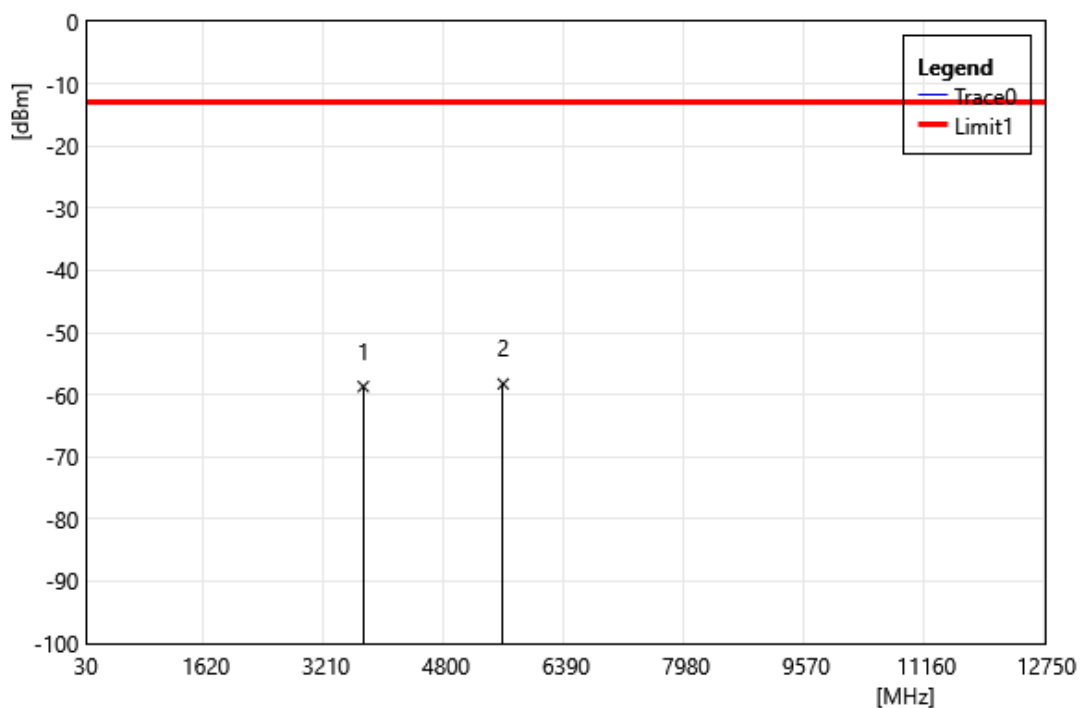
ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	3815.20	-67.18	7.17	-60.01	-13.00	-47.01	PEAK
2	5722.80	-69.79	11.79	-58.00	-13.00	-45.00	PEAK

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 4_CH9262		
Polarization:	Vertical		
Remark:			



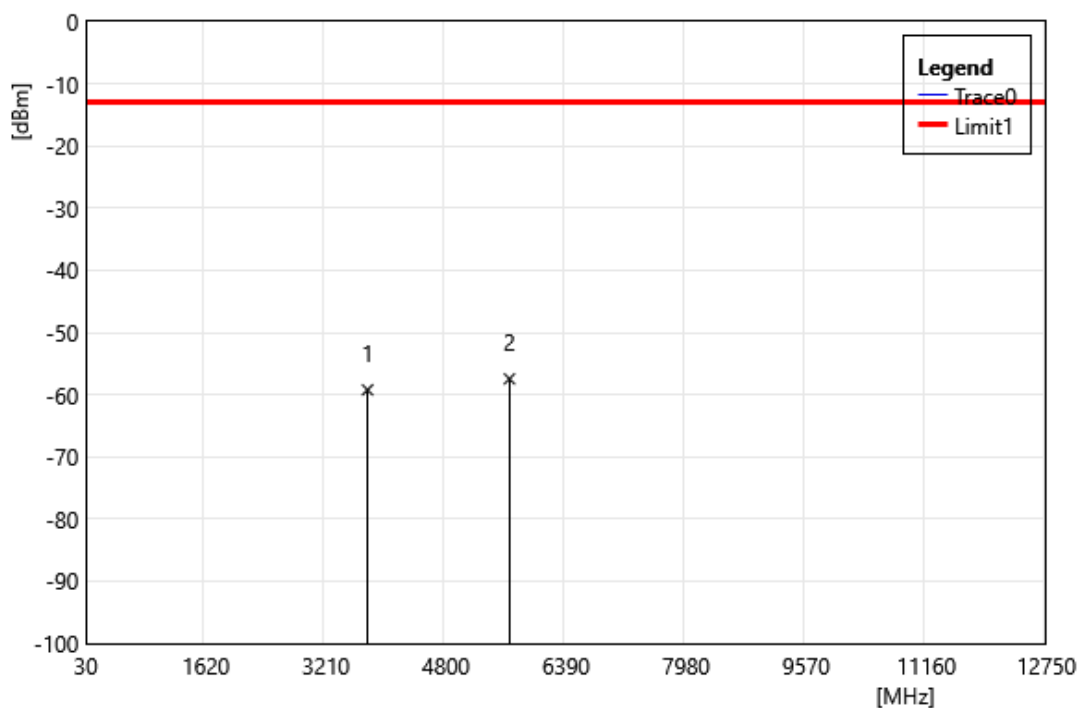
ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	3704.80	-66.69	6.85	-59.84	-13.00	-46.84	PEAK
2	5557.20	-69.12	11.44	-57.68	-13.00	-44.68	PEAK

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 4_CH9262		
Polarization:	Horizontal		
Remark:			



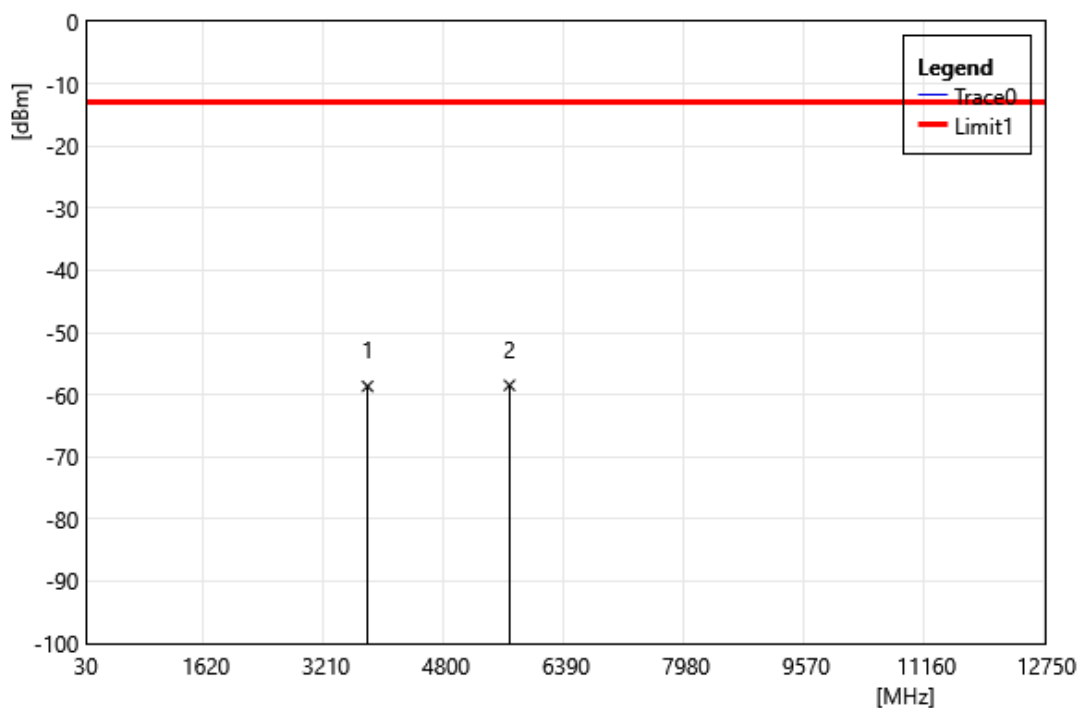
ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	3704.80	-65.53	6.85	-58.68	-13.00	-45.68	PEAK
2	5557.20	-69.70	11.44	-58.26	-13.00	-45.26	PEAK

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 4_CH9400		
Polarization:	Horizontal		
Remark:			



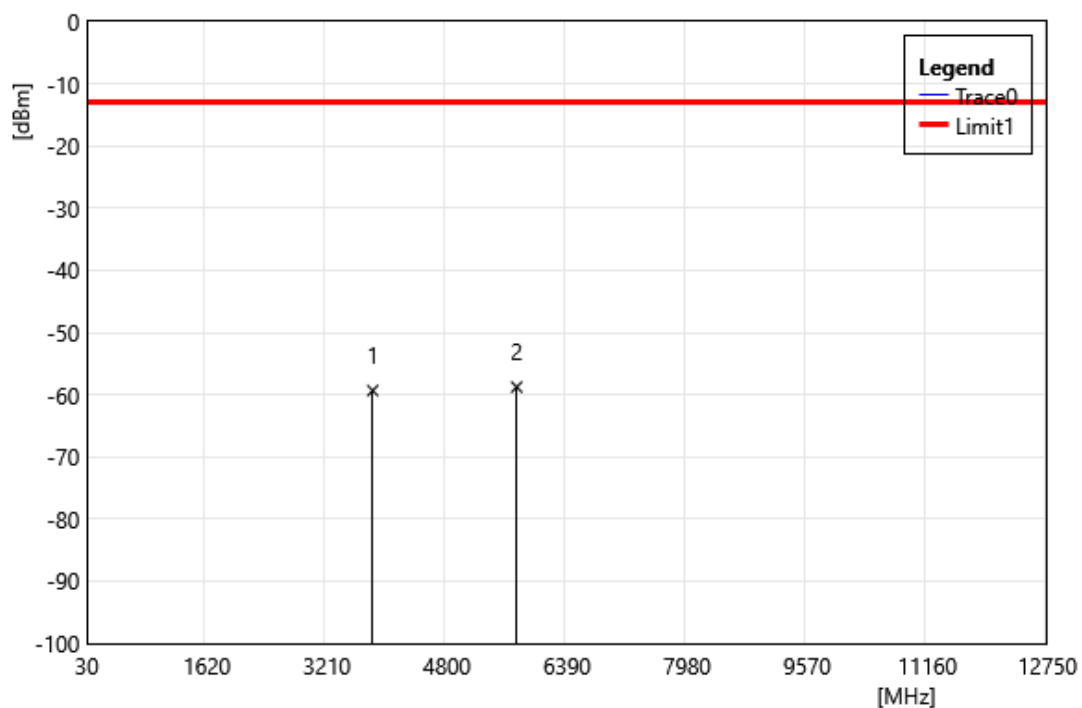
ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	3760.00	-66.23	7.01	-59.22	-13.00	-46.22	PEAK
2	5640.00	-69.08	11.62	-57.46	-13.00	-44.46	PEAK

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 4_CH9400		
Polarization:	Horizontal		
Remark:			



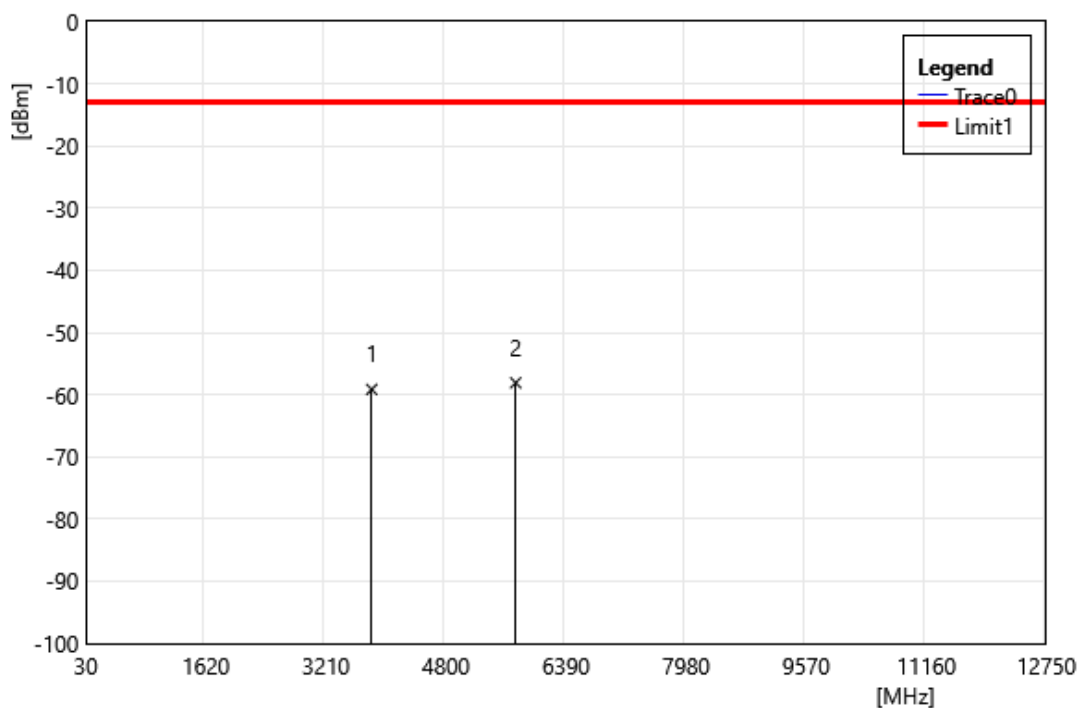
ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	3760.00	-65.66	7.01	-58.65	-13.00	-45.65	PEAK
2	5640.00	-70.11	11.62	-58.49	-13.00	-45.49	PEAK

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 4_CH9538		
Polarization:	Vertical		
Remark:			



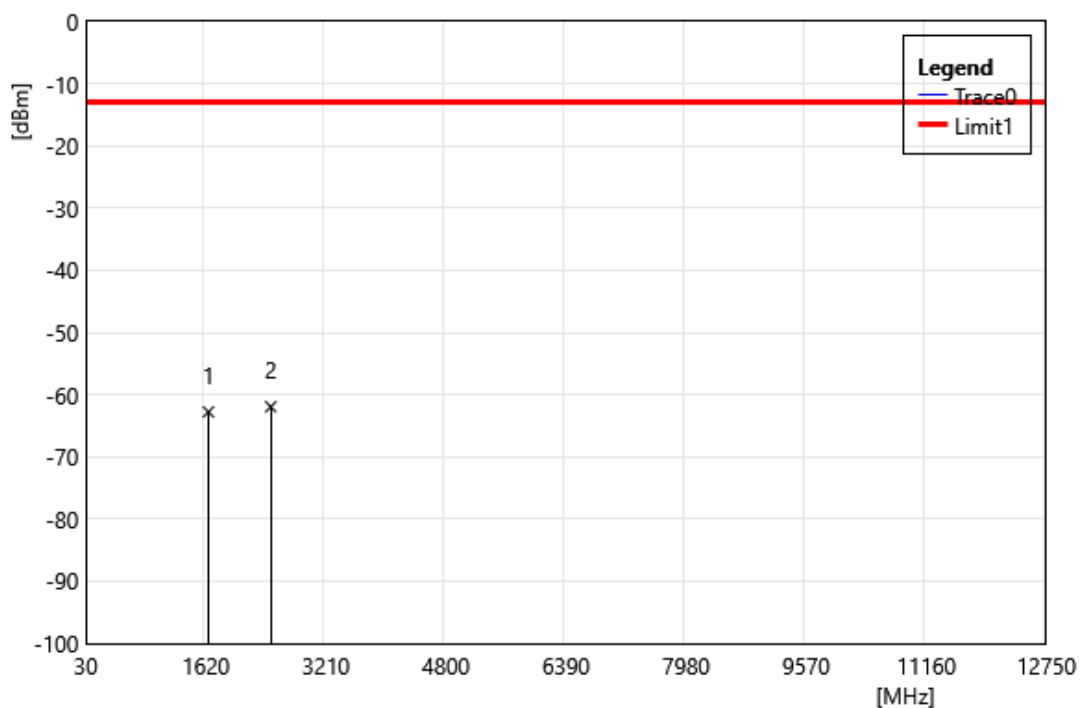
ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	3815.20	-66.51	7.17	-59.34	-13.00	-46.34	PEAK
2	5722.80	-70.56	11.79	-58.77	-13.00	-45.77	PEAK

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 4_CH9538		
Polarization:	Horizontal		
Remark:			



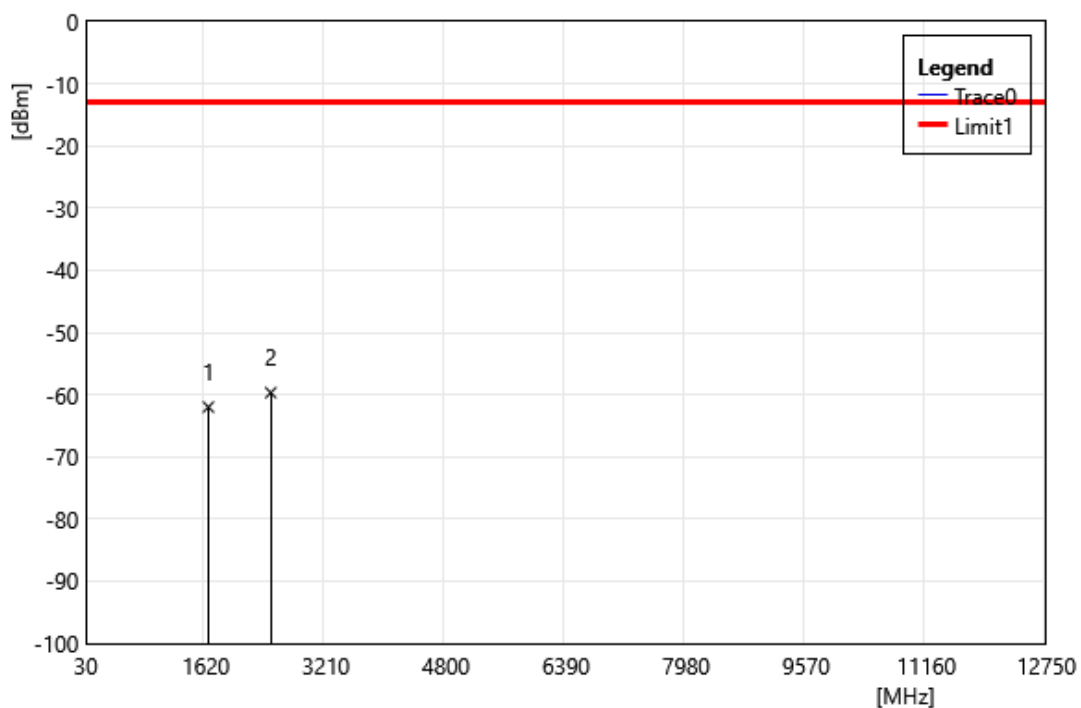
ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	3815.20	-66.32	7.17	-59.15	-13.00	-46.15	PEAK
2	5722.80	-69.88	11.79	-58.09	-13.00	-45.09	PEAK

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 5_CH4132		
Polarization:	Vertical		
Remark:			



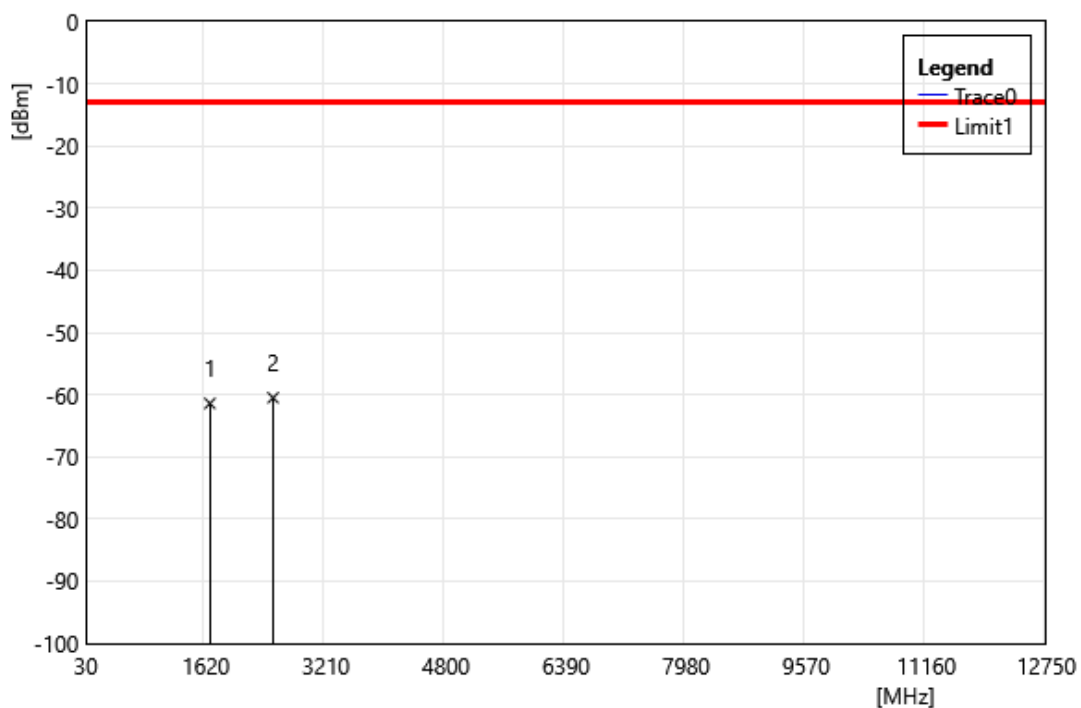
ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	1652.80	-64.32	1.56	-62.76	-13.00	-49.76	PEAK
2	2479.20	-65.80	3.87	-61.93	-13.00	-48.93	PEAK

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 5_CH4132		
Polarization:	Horizontal		
Remark:			



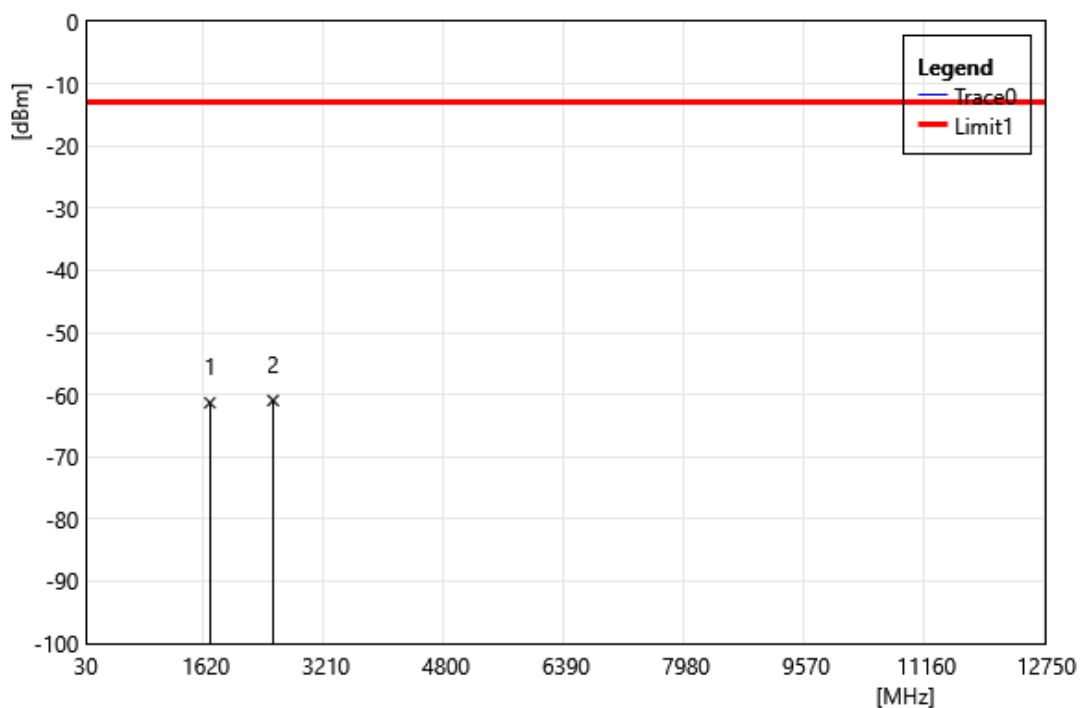
ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	1652.80	-63.56	1.56	-62.00	-13.00	-49.00	PEAK
2	2479.20	-63.54	3.87	-59.67	-13.00	-46.67	PEAK

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 5_CH4183		
Polarization:	Vertical		
Remark:			



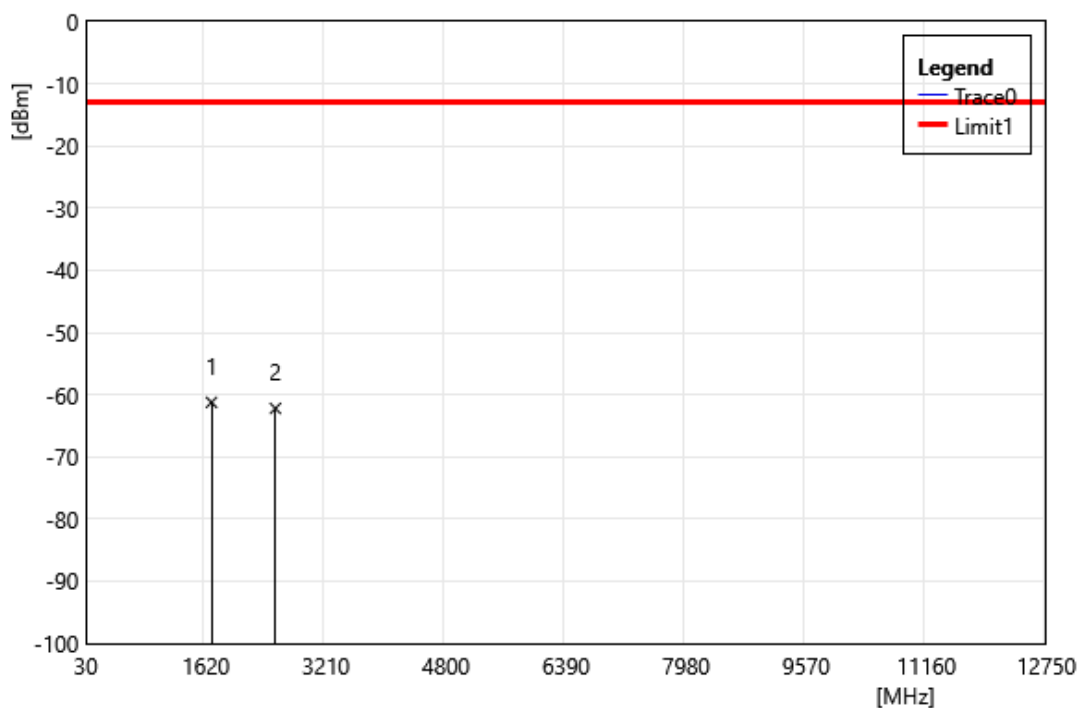
ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	1673.20	-63.02	1.62	-61.40	-13.00	-48.40	PEAK
2	2509.80	-64.46	3.97	-60.49	-13.00	-47.49	PEAK

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 5_CH4183		
Polarization:	Horizontal		
Remark:			



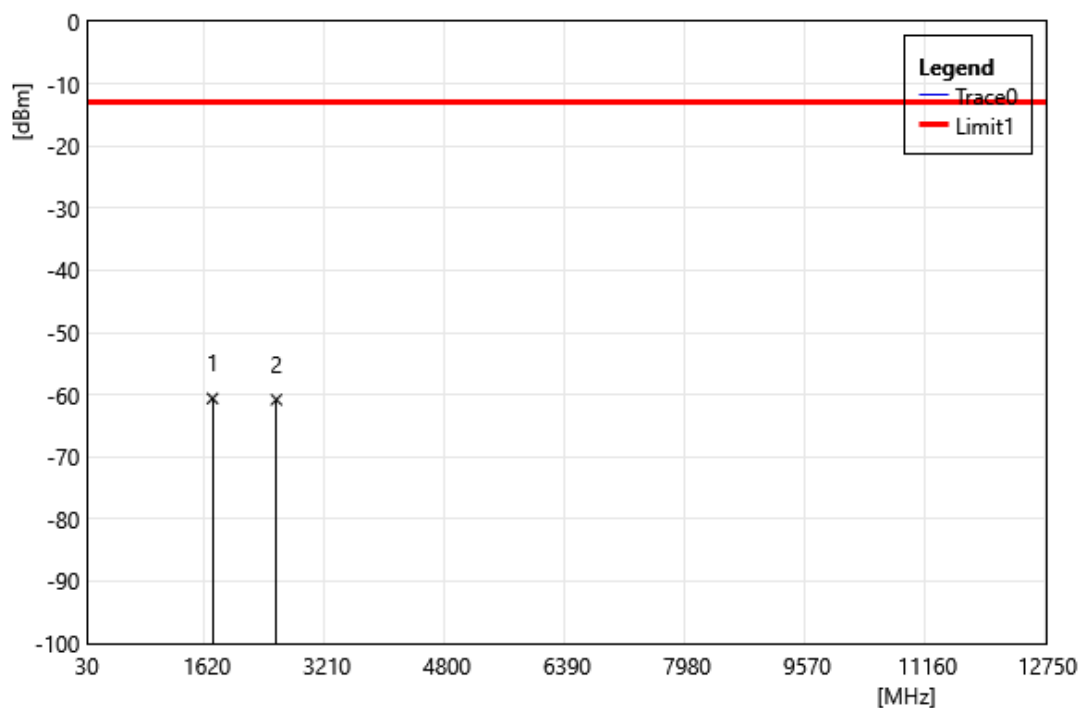
ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	1673.20	-62.93	1.62	-61.31	-13.00	-48.31	PEAK
2	2509.80	-64.89	3.97	-60.92	-13.00	-47.92	PEAK

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 5_CH4233		
Polarization:	Vertical		
Remark:			



ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	1693.20	-62.91	1.67	-61.24	-13.00	-48.24	PEAK
2	2539.80	-66.27	4.08	-62.19	-13.00	-49.19	PEAK

Test Site:	966 Chamber	Standard:	WCDMA
Test Mode:	3G_BAND 5_CH4233		
Polarization:	Horizontal		
Remark:			



ID	Frequency MHz	Reading dBm	Correct Factor dB/m	Result dBm	Limit dBm	Margin dB	Remark
1	1693.20	-62.28	1.67	-60.61	-13.00	-47.61	PEAK
2	2539.80	-64.88	4.08	-60.80	-13.00	-47.80	PEAK

4.7. Frequency Stability for Temperature & Voltage

Frequency Error vs. Voltage:

Voltage							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	9262	VL	NT	-0.26	-0.000140	±2.5	PASS
Band2	9262	VN	NT	-4.67	-0.002521	±2.5	PASS
Band2	9262	VH	NT	-4.78	-0.002580	±2.5	PASS
Band2	9400	VL	NT	-6.00	-0.003191	±2.5	PASS
Band2	9400	VN	NT	-5.07	-0.002697	±2.5	PASS
Band2	9400	VH	NT	-0.49	-0.000261	±2.5	PASS
Band2	9538	VL	NT	-5.05	-0.002647	±2.5	PASS
Band2	9538	VN	NT	-8.10	-0.004246	±2.5	PASS
Band2	9538	VH	NT	-1.48	-0.000776	±2.5	PASS
Band4	1312	VL	NT	2.44	0.001425	±2.5	PASS
Band4	1312	VN	NT	4.58	0.002675	±2.5	PASS
Band4	1312	VH	NT	3.43	0.002003	±2.5	PASS
Band4	1413	VL	NT	-7.40	-0.004271	±2.5	PASS
Band4	1413	VN	NT	-3.60	-0.002078	±2.5	PASS
Band4	1413	VH	NT	0.70	0.000404	±2.5	PASS
Band4	1513	VL	NT	-16.14	-0.009209	±2.5	PASS
Band4	1513	VN	NT	-14.91	-0.008507	±2.5	PASS
Band4	1513	VH	NT	-7.25	-0.004137	±2.5	PASS
Band5	4132	VL	NT	-1.83	-0.002214	±2.5	PASS
Band5	4132	VN	NT	3.95	0.004780	±2.5	PASS
Band5	4132	VH	NT	1.51	0.001827	±2.5	PASS
Band5	4182	VL	NT	-1.79	-0.002140	±2.5	PASS
Band5	4182	VN	NT	1.92	0.002296	±2.5	PASS
Band5	4182	VH	NT	1.57	0.001877	±2.5	PASS
Band5	4233	VL	NT	0.60	0.000709	±2.5	PASS
Band5	4233	VN	NT	-0.67	-0.000791	±2.5	PASS
Band5	4233	VH	NT	0.96	0.001134	±2.5	PASS

Frequency Error vs. Temperature:

Temperature							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	9262	NV	-30	0.49	0.000265	±2.5	PASS
Band2	9262	NV	-20	1.79	0.000966	±2.5	PASS
Band2	9262	NV	-10	-3.78	-0.002041	±2.5	PASS
Band2	9262	NV	0	-4.26	-0.002300	±2.5	PASS
Band2	9262	NV	10	-0.09	-0.000049	±2.5	PASS
Band2	9262	NV	20	-3.39	-0.001830	±2.5	PASS
Band2	9262	NV	30	-5.22	-0.002818	±2.5	PASS
Band2	9262	NV	40	-2.64	-0.001425	±2.5	PASS
Band2	9262	NV	50	-1.56	-0.000842	±2.5	PASS
Band2	9400	NV	-30	-4.41	-0.002346	±2.5	PASS
Band2	9400	NV	-20	-6.52	-0.003468	±2.5	PASS
Band2	9400	NV	-10	-1.01	-0.000537	±2.5	PASS
Band2	9400	NV	0	-0.27	-0.000144	±2.5	PASS
Band2	9400	NV	10	-3.02	-0.001606	±2.5	PASS
Band2	9400	NV	20	-2.61	-0.001388	±2.5	PASS
Band2	9400	NV	30	-4.23	-0.002250	±2.5	PASS
Band2	9400	NV	40	-2.81	-0.001495	±2.5	PASS
Band2	9400	NV	50	-6.03	-0.003207	±2.5	PASS
Band2	9538	NV	-30	0.32	0.000168	±2.5	PASS
Band2	9538	NV	-20	-9.59	-0.005027	±2.5	PASS
Band2	9538	NV	-10	0.15	0.000079	±2.5	PASS
Band2	9538	NV	0	-5.83	-0.003056	±2.5	PASS
Band2	9538	NV	10	-3.27	-0.001714	±2.5	PASS
Band2	9538	NV	20	-3.76	-0.001971	±2.5	PASS
Band2	9538	NV	30	-8.80	-0.004613	±2.5	PASS
Band2	9538	NV	40	-5.88	-0.003082	±2.5	PASS
Band2	9538	NV	50	-5.23	-0.002742	±2.5	PASS

Temperature							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	1312	NV	-30	4.01	0.002342	±2.5	PASS
Band4	1312	NV	-20	4.99	0.002914	±2.5	PASS
Band4	1312	NV	-10	2.98	0.001740	±2.5	PASS
Band4	1312	NV	0	3.13	0.001828	±2.5	PASS
Band4	1312	NV	10	4.87	0.002844	±2.5	PASS
Band4	1312	NV	20	4.81	0.002809	±2.5	PASS
Band4	1312	NV	30	6.32	0.003691	±2.5	PASS
Band4	1312	NV	40	6.79	0.003965	±2.5	PASS
Band4	1312	NV	50	7.23	0.004222	±2.5	PASS
Band4	1413	NV	-30	-1.17	-0.000675	±2.5	PASS
Band4	1413	NV	-20	-2.96	-0.001708	±2.5	PASS
Band4	1413	NV	-10	-4.46	-0.002574	±2.5	PASS
Band4	1413	NV	0	-1.11	-0.000641	±2.5	PASS
Band4	1413	NV	10	-5.74	-0.003313	±2.5	PASS
Band4	1413	NV	20	-1.14	-0.000658	±2.5	PASS
Band4	1413	NV	30	-1.89	-0.001091	±2.5	PASS
Band4	1413	NV	40	-4.59	-0.002649	±2.5	PASS
Band4	1413	NV	50	-5.65	-0.003261	±2.5	PASS
Band4	1513	NV	-30	-10.71	-0.006111	±2.5	PASS
Band4	1513	NV	-20	-14.24	-0.008125	±2.5	PASS
Band4	1513	NV	-10	-12.08	-0.006893	±2.5	PASS
Band4	1513	NV	0	-11.69	-0.006670	±2.5	PASS
Band4	1513	NV	10	-13.23	-0.007549	±2.5	PASS
Band4	1513	NV	20	-10.70	-0.006105	±2.5	PASS
Band4	1513	NV	30	-7.43	-0.004239	±2.5	PASS
Band4	1513	NV	40	-9.93	-0.005666	±2.5	PASS
Band4	1513	NV	50	-10.70	-0.006105	±2.5	PASS

Temperature							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	4132	NV	-30	3.88	0.004695	±2.5	PASS
Band5	4132	NV	-20	0.87	0.001053	±2.5	PASS
Band5	4132	NV	-10	1.39	0.001682	±2.5	PASS
Band5	4132	NV	0	0.35	0.000424	±2.5	PASS
Band5	4132	NV	10	4.58	0.005542	±2.5	PASS
Band5	4132	NV	20	4.07	0.004925	±2.5	PASS
Band5	4132	NV	30	3.36	0.004066	±2.5	PASS
Band5	4132	NV	40	1.97	0.002384	±2.5	PASS
Band5	4132	NV	50	1.39	0.001682	±2.5	PASS
Band5	4182	NV	-30	4.00	0.004782	±2.5	PASS
Band5	4182	NV	-20	0.64	0.000765	±2.5	PASS
Band5	4182	NV	-10	1.43	0.001710	±2.5	PASS
Band5	4182	NV	0	2.15	0.002571	±2.5	PASS
Band5	4182	NV	10	0.08	0.000096	±2.5	PASS
Band5	4182	NV	20	2.70	0.003228	±2.5	PASS
Band5	4182	NV	30	-0.06	-0.000072	±2.5	PASS
Band5	4182	NV	40	2.00	0.002391	±2.5	PASS
Band5	4182	NV	50	0.00	0.000000	±2.5	PASS
Band5	4233	NV	-30	-1.71	-0.002020	±2.5	PASS
Band5	4233	NV	-20	3.07	0.003626	±2.5	PASS
Band5	4233	NV	-10	-1.28	-0.001512	±2.5	PASS
Band5	4233	NV	0	0.23	0.000272	±2.5	PASS
Band5	4233	NV	10	-3.48	-0.004111	±2.5	PASS
Band5	4233	NV	20	0.41	0.000484	±2.5	PASS
Band5	4233	NV	30	0.73	0.000862	±2.5	PASS
Band5	4233	NV	40	-2.38	-0.002811	±2.5	PASS
Band5	4233	NV	50	2.35	0.002776	±2.5	PASS

--- END---