

**Appendix B**

**Test Information:**

<b>Serial No.:</b>	2N1N-3	<b>Test Date:</b>	2024/07/21~2024/07/22
<b>Test Site:</b>	RF	<b>Test Mode:</b>	Transmitting
<b>Tester:</b>	Karl Liang	<b>Test Result:</b>	Pass

**Environmental Conditions:**

<b>Temperature:</b> (°C):	27.9~28	<b>Relative Humidity:</b> (%)	63~64	<b>ATM Pressure:</b> (kPa)	100.2~100.8
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**Test Equipment List and Details:**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Micro-Coax	Coaxial Cable	UFB205A	323308-024	2024/01/02	2025/01/01
Mini-Circuits	Coaxial Power Splitters & Combiner	ZFRSC-183-S+	SF448201614	2024/02/25	2025/02/24
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30173	2023/10/18	2024/10/17
TDK-Lambda	DC Power Supply	Z+60-14	F-08-EM038-1	N/A	N/A
R&S	Wideband Radio Communication Tester	CMW500	149216	2023/10/18	2024/10/17
All-sun	Clamp Meter	EM305A	8348897	2023/08/03	2024/08/02
R&S	Spectrum Analyzer	FSV40	101461	2023/11/27	2024/11/26

\* Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

**Frequency stability vs. temperature & Frequency stability vs. voltage Compliance****FCC Part 22H****Band 5**

Mode	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)	Result
R99_Middle_TN/VN	-10.3	-0.012	±2.5	Pass
R99_Middle_T1/VN	-8.9	-0.011	±2.5	Pass
R99_Middle_T2/VN	-11.9	-0.014	±2.5	Pass
R99_Middle_T3/VN	-6.9	-0.008	±2.5	Pass
R99_Middle_T4/VN	-9.8	-0.012	±2.5	Pass
R99_Middle_T5/VN	-10.4	-0.012	±2.5	Pass
R99_Middle_T6/VN	-10.5	-0.013	±2.5	Pass
R99_Middle_T7/VN	-10.6	-0.013	±2.5	Pass
R99_Middle_T8/VN	-9.8	-0.012	±2.5	Pass
R99_Middle_TN/VH	-9.5	-0.011	±2.5	Pass
R99_Middle_TN/VL	-10.3	-0.012	±2.5	Pass

**Note:**

**Frequency Error (ppm)=Frequency Error (MHz)/Test Channel(MHz)**

**TN: 20 °C; T1: -30 °C; T2: -20 °C; T3: -10 °C; T4: 0 °C; T5: 10 °C; T6: 30 °C; T7: 40 °C; T8: 50 °C.**

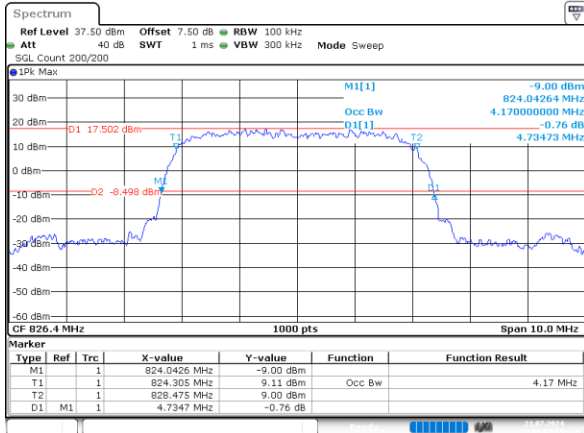
**VN: Normal Voltage; VL: Low Voltage; VH: High Voltage.**

**Occupied Bandwidth****FCC Part 22H****Band 5 , Normal**

<b>Mode</b>	<b>99% OBW (MHz)</b>	<b>EBW (MHz)</b>
R99_Low	4.170	4.735
R99_Middle	4.190	4.725
R99_High	4.180	4.735
HSDPA_Low_Subtest1	4.180	4.745
HSDPA_Middle_Subtest1	4.190	4.725
HSDPA_High_Subtest1	4.180	4.735
HSUPA_Low_Subtest1	4.170	4.725
HSUPA_Middle_Subtest1	4.180	4.715
HSUPA_High_Subtest1	4.170	4.715

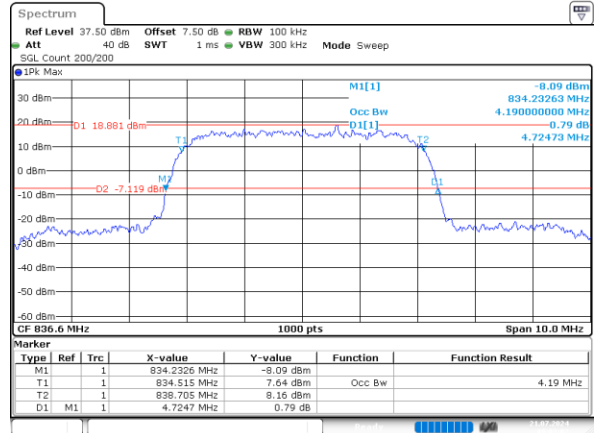
Band 5, Normal

R99\_Low 4.170MHz



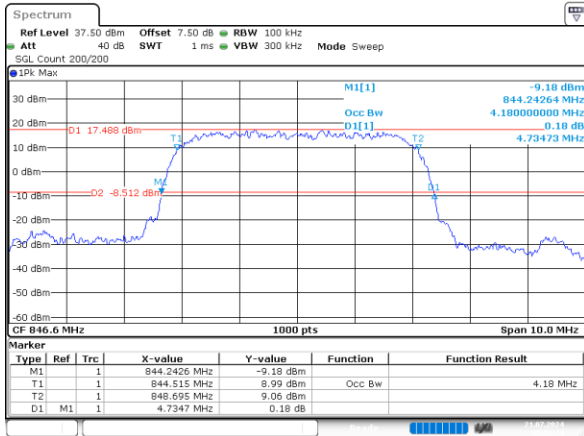
ProjectNo.:2402U81179E-RF Tester:Karl Liang  
Date: 21.JUL.2024 09:02:15

R99\_Middle 4.190MHz



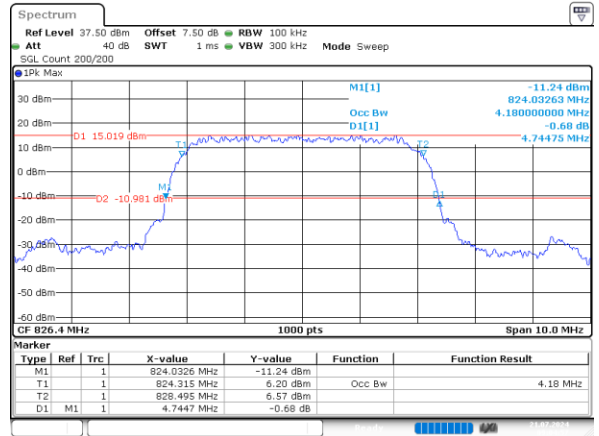
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Date: 21.JUL.2024 09:03:03

R99\_High 4.180MHz



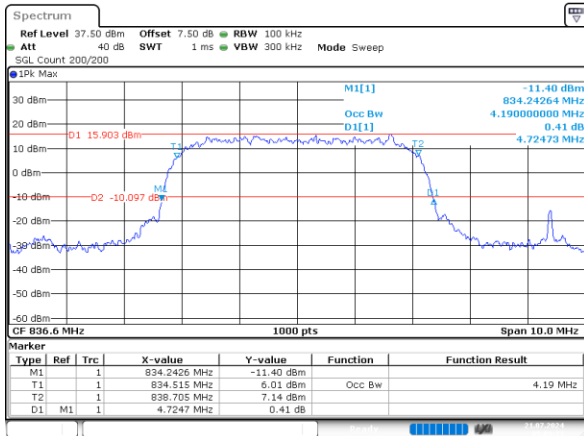
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HSDPA\_Low\_Subtest1 4.180MHz



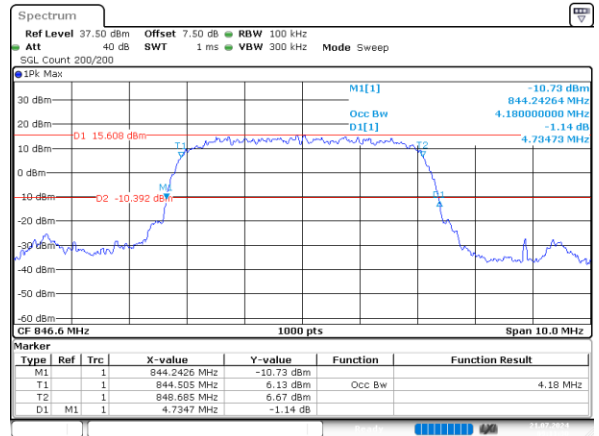
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HSDPA\_Middle\_Subtest1 4.190MHz



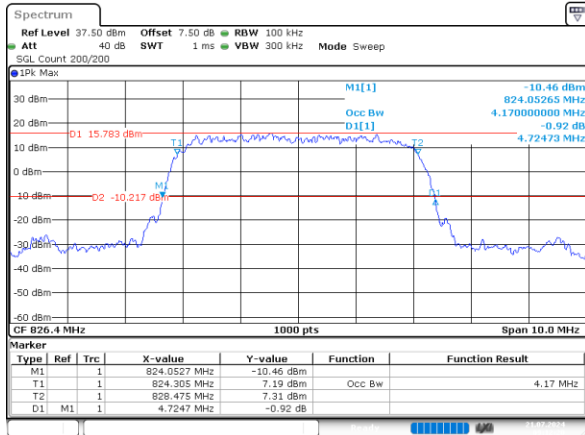
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HSDPA\_High\_Subtest1 4.180MHz



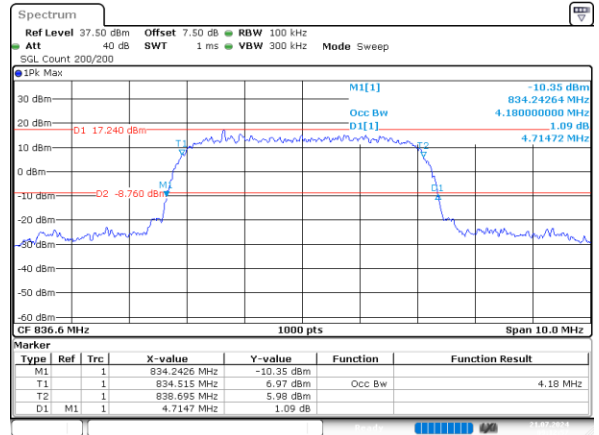
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Date: 21.JUL.2024 09:11:31

HSUPA\_Low\_Subtest1 4.170MHz



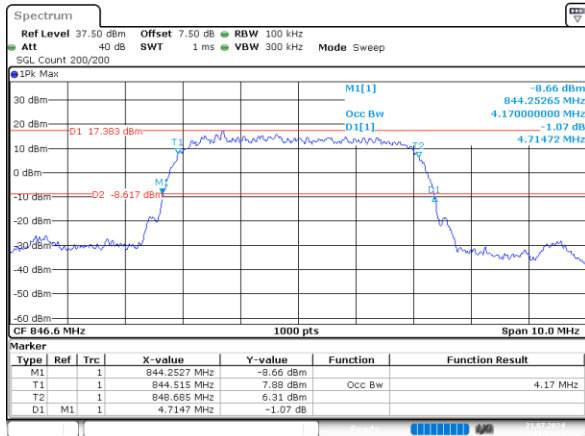
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HSUPA\_Middle\_Subtest1 4.180MHz



ProjectNo.:2402U81179E-RF Tester:Karl Liang  
Date: 21.JUL.2024 09:12:58

HSUPA\_High\_Subtest1 4.170MHz



ProjectNo.:2402U81179E-RF Tester:Karl Liang  
Date: 21.JUL.2024 09:13:34

**RF Output Power****FCC Part 22H****Band 5 , Normal**

Mode	Conducted Power (dBm)	ERP (dBm)	Limit (dBm)	Result
R99_Low	23.08	17.740	38.45	Pass
R99_Middle	23.19	17.850	38.45	Pass
R99_High	23.18	17.840	38.45	Pass
HSDPA_Low_Subtest1	21.11	15.770	38.45	Pass
HSDPA_Low_Subtest2	21.37	16.030	38.45	Pass
HSDPA_Low_Subtest3	21.29	15.950	38.45	Pass
HSDPA_Low_Subtest4	21.29	15.950	38.45	Pass
HSDPA_Middle_Subtest1	20.00	14.660	38.45	Pass
HSDPA_Middle_Subtest2	21.35	16.010	38.45	Pass
HSDPA_Middle_Subtest3	21.27	15.930	38.45	Pass
HSDPA_Middle_Subtest4	21.23	15.890	38.45	Pass
HSDPA_High_Subtest1	21.01	15.670	38.45	Pass

**Note:**

$$\text{ERP} = \text{Conducted Power(dBm)} - \text{Lc(dB)} + \text{G}_T(\text{dBd})$$

$$\text{G}_T(\text{dBd}) = \text{G}_T(\text{dBi}) - 2.15$$

$$1. \text{Ant Gain} = -3.19\text{dBi};$$

$$2. \text{C}_L = \text{signal attenuation in the connecting cable between the transmitter and antenna in 0dB}$$

**Peak-to-average Ratio(PAR)****FCC Part 22H****Band 5 , Normal**

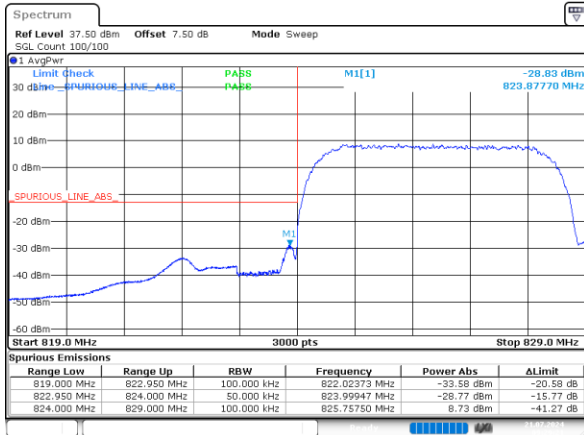
<b>Mode</b>	<b>Value (dB)</b>	<b>Limit (dB)</b>
R99_Low	2.96	13
R99_Middle	2.78	13
R99_High	3.04	13
HSDPA_Low_Subtest1	3.88	13
HSDPA_Middle_Subtest1	3.77	13
HSDPA_High_Subtest1	3.88	13
HSUPA_Low_Subtest1	4.58	13
HSUPA_Middle_Subtest1	4.38	13
HSUPA_High_Subtest1	4.58	13

### Out of band emission,Band Edge

### FCC Part 22H

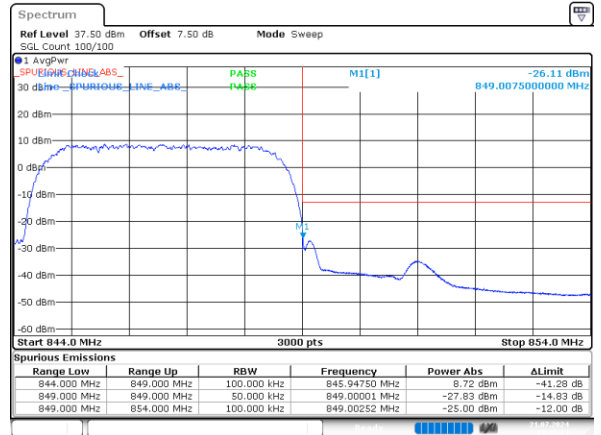
### Band 5 , Normal

#### R99\_Low -28.83dBm



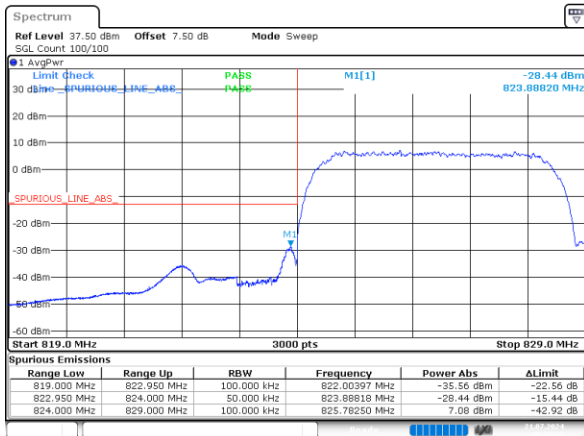
ProjectNo.:2402U81179E-RF Tester:Karl Liang  
Date: 21.JUL.2024 09:29:22

#### R99\_High -26.11dBm



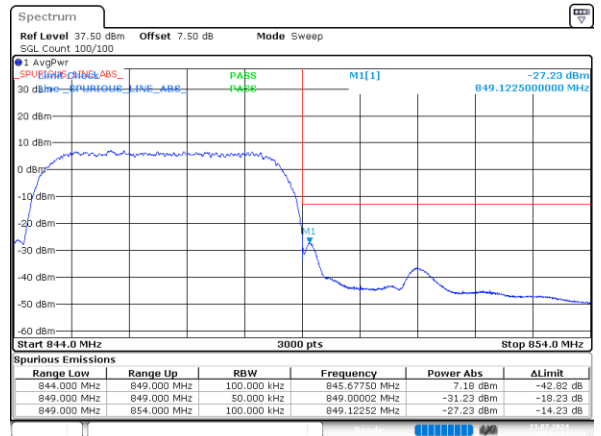
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Date: 21.JUL.2024 09:30:25

#### HSDPA\_Low\_Subtest1 -28.44dBm



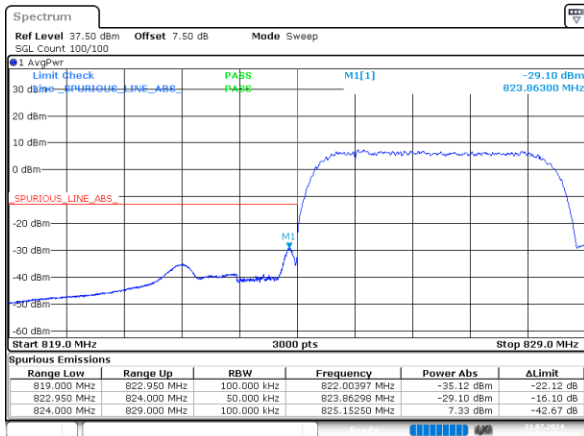
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#### HSDPA\_High\_Subtest1 -27.23dBm



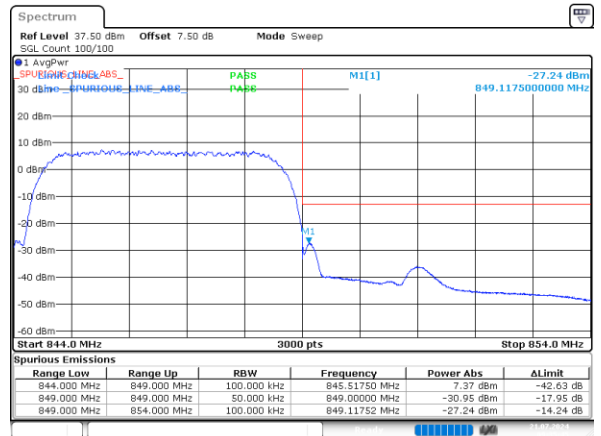
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#### HSUPA\_Low\_Subtest1 -29.10dBm



ProjectNo.:2402U81179E-RF Tester:Karl Liang  
Date: 21.JUL.2024 09:34:50

#### HSUPA\_High\_Subtest1 -27.24dBm



ProjectNo.:2402U81179E-RF Tester:Karl Liang  
Date: 21.JUL.2024 09:35:46



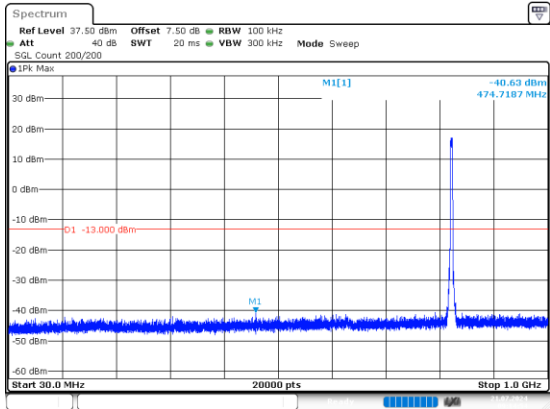
### Spurious Emissions at Antenna Terminal

### FCC Part 22H

### Band 5 , Normal

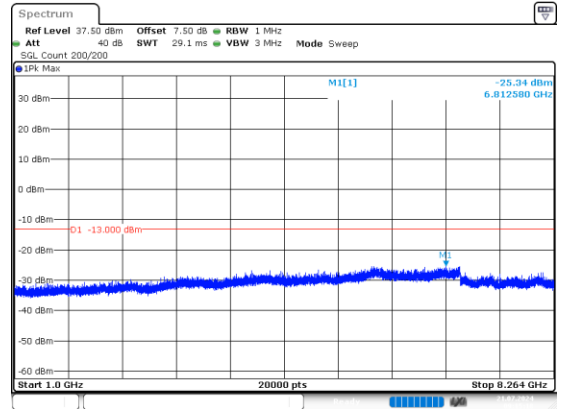
### R99\_Low

Below 1G



ProjectNo.:2402U81179E-RF Tester:Karl Liang  
Date: 21.JUL.2024 09:14:55

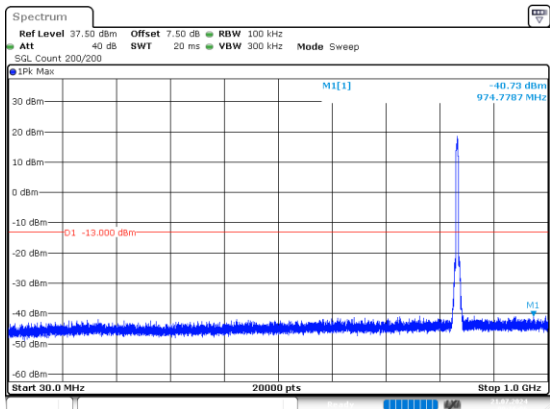
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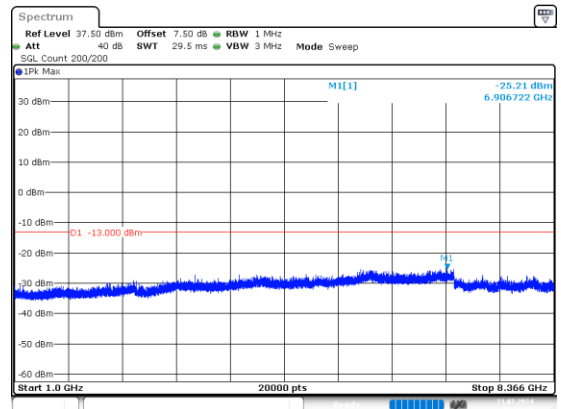
### R99\_Middle

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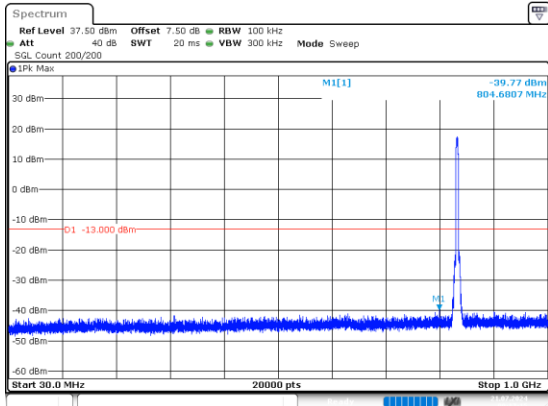
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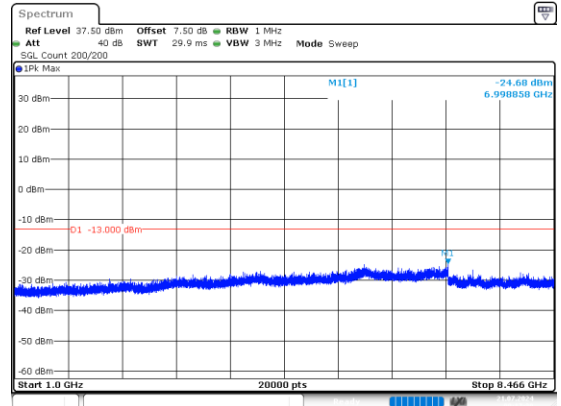
### R99\_High

Below 1G



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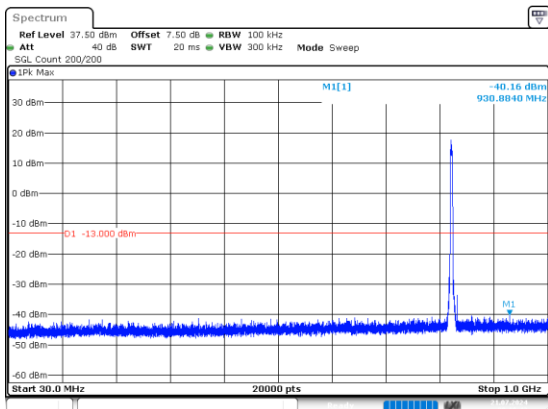
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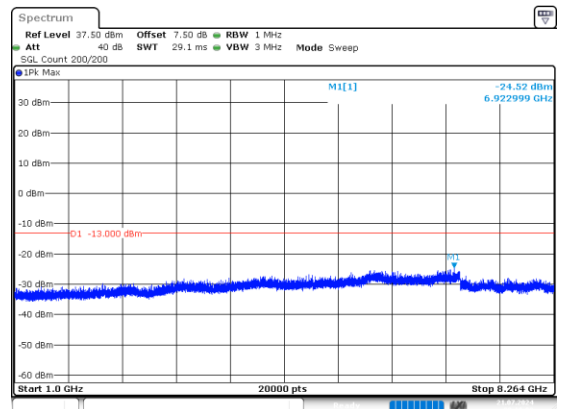
### HSDPA\_Low\_Subtest1

Below 1G



ProjectNo.:2402U81179E-RF Tester:Karl Liang  
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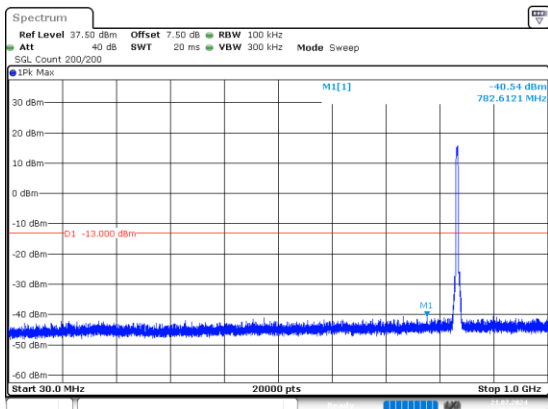
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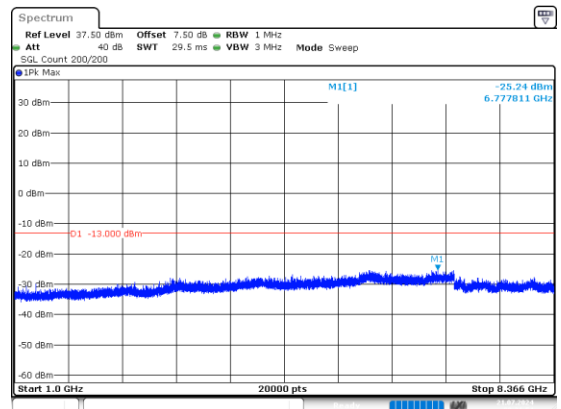
### HSDPA\_Middle\_Subtest1

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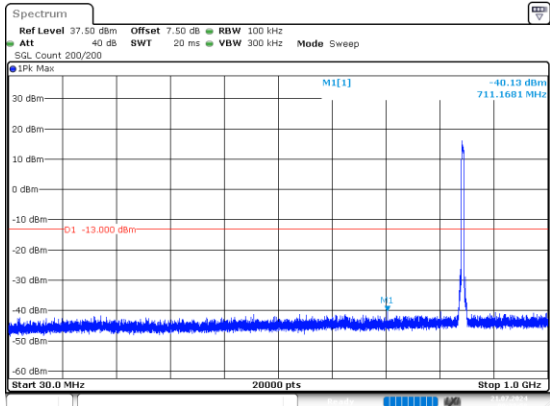
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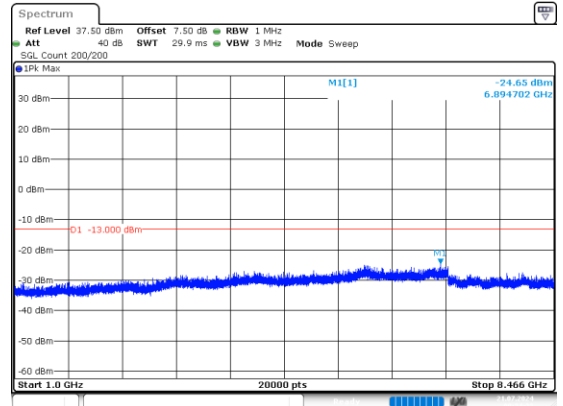
### HSDPA\_High\_Subtest1

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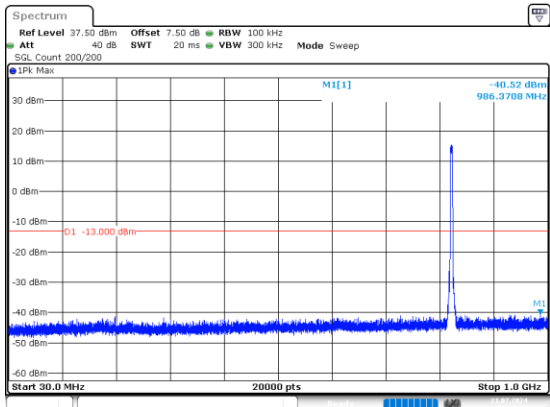
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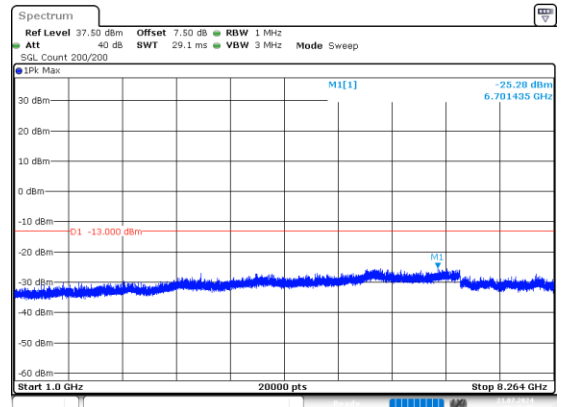
### HSUPA\_Low\_Subtest1

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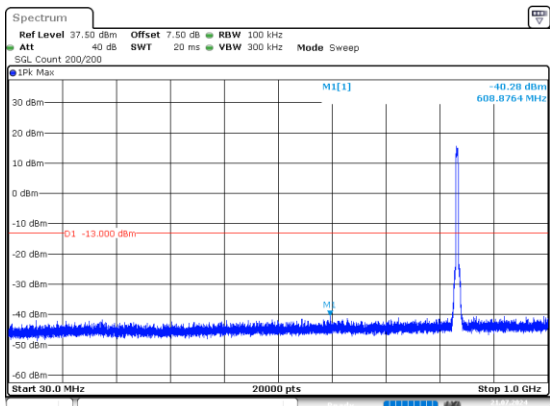
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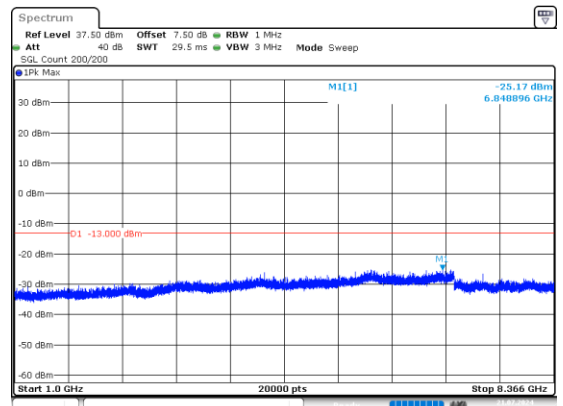
### HSUPA\_Middle\_Subtest1

Below 1G



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Date: 21.JUL.2024 09:26:31

Above 1G

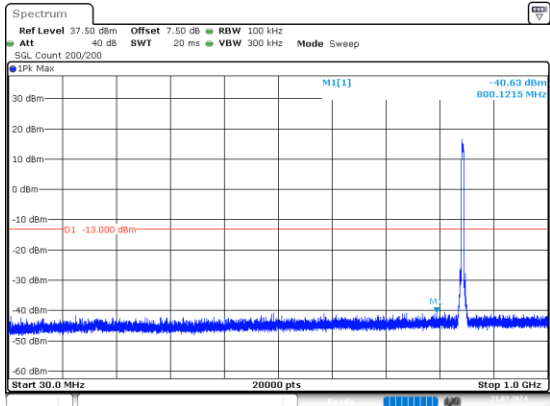


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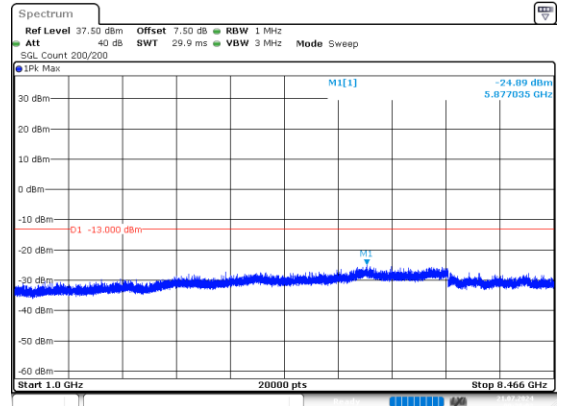
### HSUPA\_High\_Subtest1

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Above 1G



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Date: 21.JUL.2024 09:27:40



ProjectNo.:2402U81179E-RF Tester:Karl Liang  
Date: 21.JUL.2024 09:28:04