

Appendix A

Test Information:

Serial No.:	339M-1	Test Date:	2025/06/09
Test Site:	RF	Test Mode:	Transmitting
Tester:	Loge Long	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	26.9	Relative Humidity: (%)	63	ATM Pressure: (kPa)	100.0
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
All-sun	Multimeter	EM305A	8348897	2024/08/16	2025/08/15
R&S	Spectrum Analyzer	FSV40	101947	2024/09/05	2025/09/04
R&S	Wideband Radio Communication Tester	CMW500	144976	2024/09/05	2025/09/04
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30173	2024/09/06	2025/09/05
Minl-Circuits	Coaxial Power Splitters & Combiner	ZFRSC-183-S+	SF448201614	2025/02/25	2026/02/24
Micro-Coax	Coaxial Cable	UFB205A	323308-012	2025/06/01	2026/05/31
Eastsheep	Coaxial Attenuator	5W-N-JK-6G-10dB	F-08-EM488	2025/06/07	2026/06/06
TDK-Lambda	DC Power Supply	Z+60-14	F-08-EM038-1	N/A	N/A

* 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

GSM 850

Mode	Test Channel (MHz)	Frequency Error		Limit (ppm)	Verdict
		(Hz)	(ppm)		
GSM_Middle_TN/VN	836.6	4.2	0.0051	±2.5	Pass
GSM_Middle_T1/VN	836.6	13.0	0.0155	±2.5	Pass
GSM_Middle_T2/VN	836.6	6.0	0.0072	±2.5	Pass
GSM_Middle_T3/VN	836.6	4.4	0.0052	±2.5	Pass
GSM_Middle_T4/VN	836.6	8.3	0.0099	±2.5	Pass
GSM_Middle_T5/VN	836.6	10.8	0.0129	±2.5	Pass
GSM_Middle_T6/VN	836.6	13.9	0.0166	±2.5	Pass
GSM_Middle_T7/VN	836.6	11.2	0.0134	±2.5	Pass
GSM_Middle_T8/VN	836.6	3.4	0.0041	±2.5	Pass
GSM_Middle_TN/VH	836.6	7.2	0.0086	±2.5	Pass
GSM_Middle_TN/VL	836.6	12.9	0.0154	±2.5	Pass

Note:

Frequency Error (ppm)=Frequency Error (MHz)/Test Channel(MHz)*10⁶
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.

FCC Part 24E

GSM 1900

Mode	Result (MHz)	Limit (MHz)	Verdict
GSM_Low_TN/VN	1850.080	1850	Pass
GSM_Low_T1/VN	1850.083	1850	Pass
GSM_Low_T2/VN	1850.081	1850	Pass
GSM_Low_T3/VN	1850.077	1850	Pass
GSM_Low_T4/VN	1850.082	1850	Pass
GSM_Low_T5/VN	1850.082	1850	Pass
GSM_Low_T6/VN	1850.080	1850	Pass
GSM_Low_T7/VN	1850.076	1850	Pass
GSM_Low_T8/VN	1850.081	1850	Pass
GSM_Low_TN/VH	1850.076	1850	Pass
GSM_Low_TN/VL	1850.082	1850	Pass
GSM_High_TN/VN	1909.925	1910	Pass
GSM_High_T1/VN	1909.925	1910	Pass
GSM_High_T2/VN	1909.924	1910	Pass
GSM_High_T3/VN	1909.926	1910	Pass
GSM_High_T4/VN	1909.923	1910	Pass
GSM_High_T5/VN	1909.925	1910	Pass
GSM_High_T6/VN	1909.925	1910	Pass
GSM_High_T7/VN	1909.927	1910	Pass
GSM_High_T8/VN	1909.920	1910	Pass
GSM_High_TN/VH	1909.926	1910	Pass
GSM_High_TN/VL	1909.923	1910	Pass

Note:
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

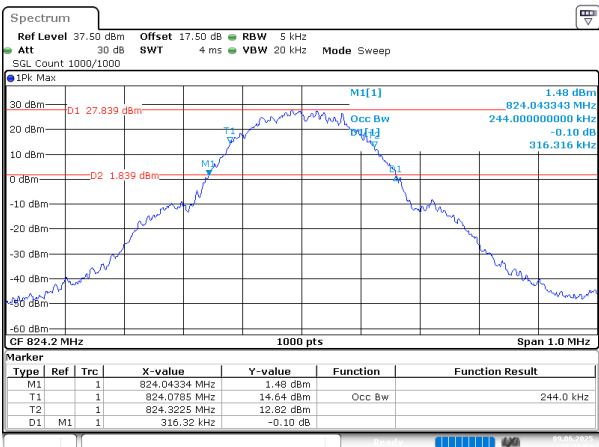
FCC Part 22H

GSM 850, Normal

Mode	99% OBW (MHz)	26dB BW (MHz)
GSM_Low	0.244	0.316
GSM_Middle	0.244	0.315
GSM_High	0.243	0.322

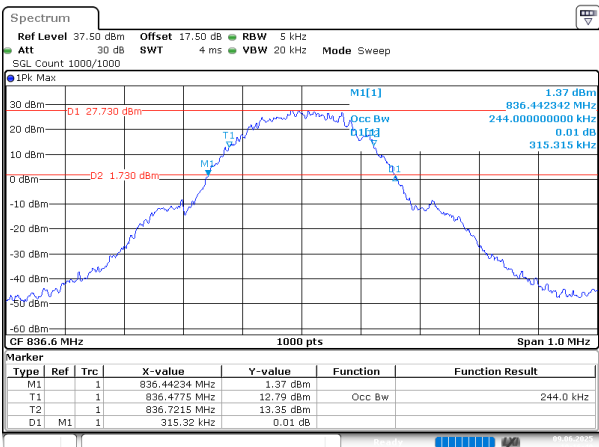
GSM 850, Normal

GSM_Low



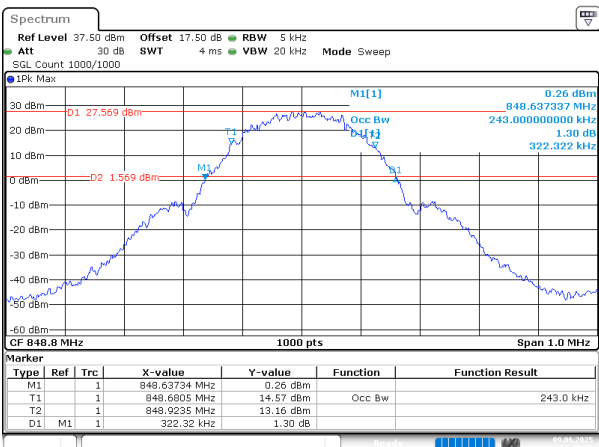
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Date: 9.JUN.2025 19:16:05

GSM_Middle



ProjectNo.:2502T01066E-RF Tester:Loge Long
Date: 9.JUN.2025 19:16:49

GSM_High



ProjectNo.:2502T01066E-RF Tester:Loge Long
Date: 9.JUN.2025 19:17:33

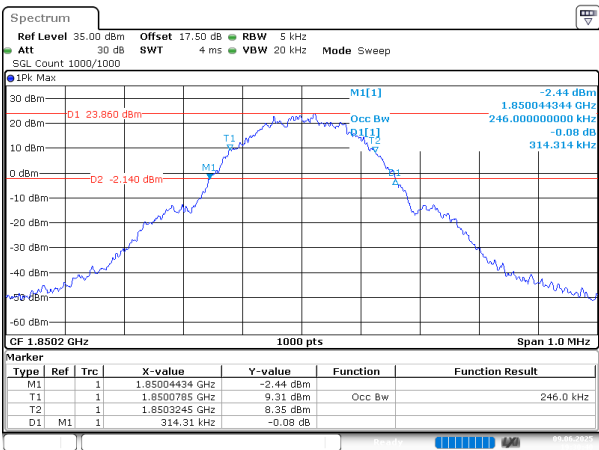
FCC Part 24E

GSM 1900, Normal

Mode	99% OBW (MHz)	26dB BW (MHz)
GSM_Low	0.246	0.314
GSM_Middle	0.245	0.319
GSM_High	0.247	0.315

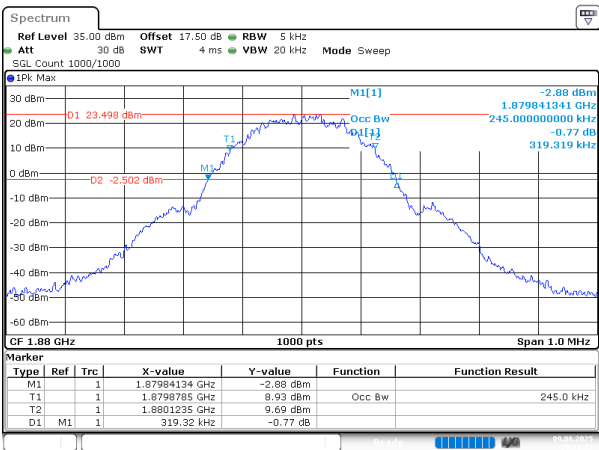
GSM 1900, Normal

GSM_Low



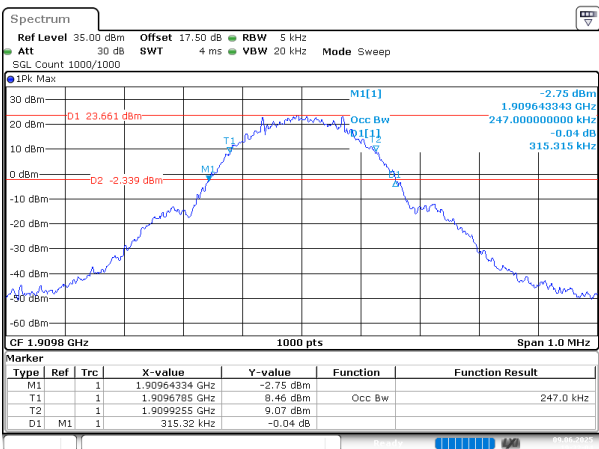
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GSM_Middle



ProjectNo.:2502T01066E-RF Tester:Loge Long
Date: 9.JUN.2025 19:31:23

GSM_High



ProjectNo.:2502T01066E-RF Tester:Loge Long
Date: 9.JUN.2025 19:32:05

RF Output Power

FCC Part 22H

GSM 850, Normal

Mode	Average Conducted Power (dBm)	ERP (dBm)	Limit (dBm)	Verdict
GSM_Low	33.08	29.62	38.45	Pass
GSM_Middle	32.92	29.46	38.45	Pass
GSM_High	33.04	29.58	38.45	Pass

Note:

$$\text{ERP} = \text{Average Conducted Power(dBm)} + \text{Antenna Gain(dBd)} - \text{Cable Loss(dB)}$$

$$\text{Antenna Gain(dBd)} = \text{Antenna Gain(dBi)} - 2.15$$

$$1.\text{Antenna Gain} = -1.31\text{dBi};$$

$$2.\text{Cable Loss} = 0\text{dB}.$$

FCC Part 24E

GSM 1900, Normal

Mode	Average Conducted Power (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
GSM_Low	28.94	26.43	33	Pass
GSM_Middle	29.17	26.66	33	Pass
GSM_High	29.48	26.97	33	Pass

Note:

$EIRP = \text{Average Conducted Power(dBm)} + \text{Antenna Gain(dBi)} - \text{Cable Loss(dB)}$

- 1.Antenna Gain = -2.51dBi;
- 2.Cable Loss = 0dB.

Peak-to-average Ratio(PAR)

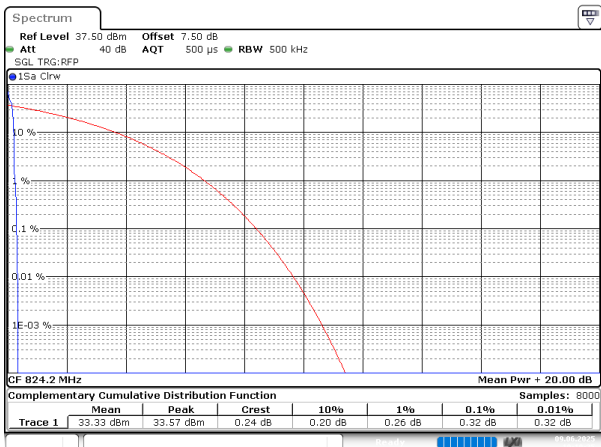
FCC Part 22H

GSM 850, Normal

Mode	Result (dB)	Limit (dB)
GSM_Low	0.32	13
GSM_Middle	0.26	13
GSM_High	0.32	13

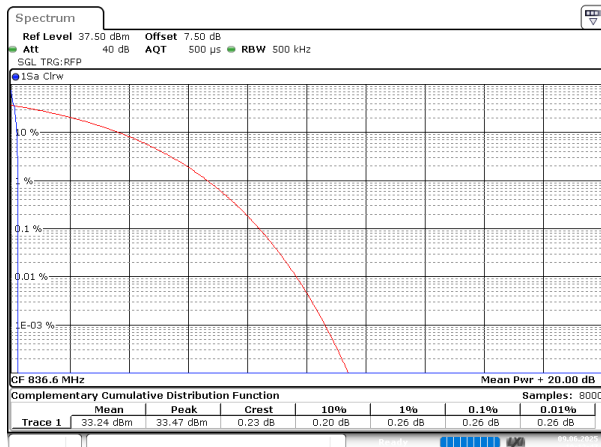
GSM 850, Normal

GSM_Low



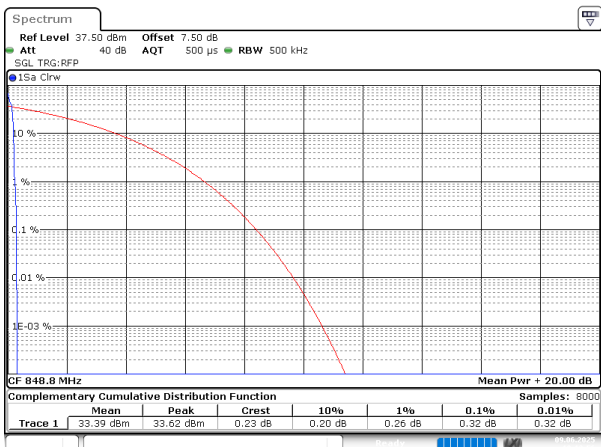
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GSM_Middle



ProjectNo.:2502T01066E-RF Tester:Loge Long
Date: 9.JUN.2025 19:12:47

GSM_High



ProjectNo.:2502T01066E-RF Tester:Loge Long
Date: 9.JUN.2025 19:13:56

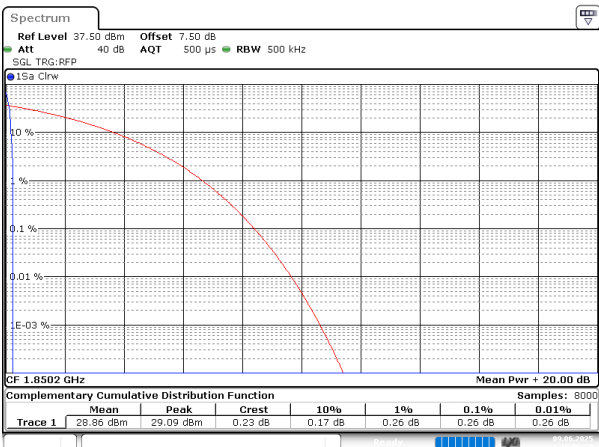
FCC Part 24E

GSM 1900, Normal

Mode	Result (dB)	Limit (dB)
GSM_Low	0.26	13
GSM_Middle	0.26	13
GSM_High	0.26	13

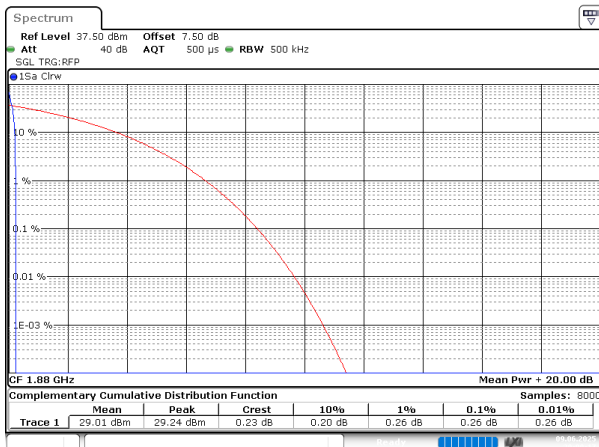
GSM 1900, Normal

GSM_Low



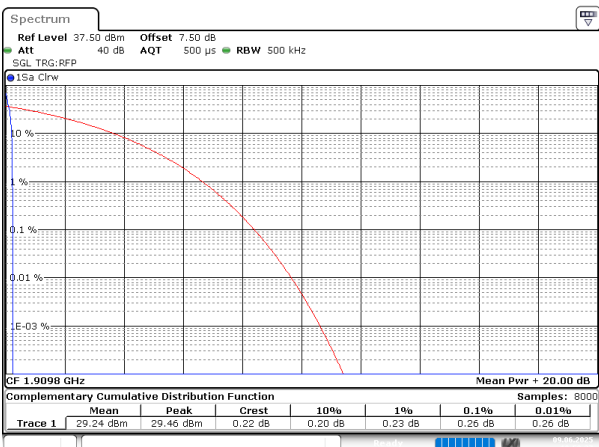
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GSM_Middle



ProjectNo.:2502T01066E-RF Tester:Loge Long
Date: 9.JUN.2025 20:00:17

GSM_High



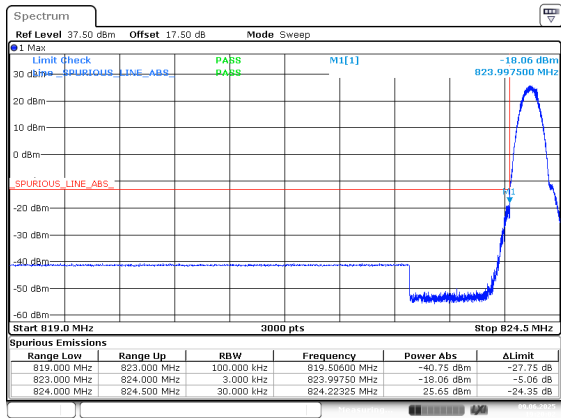
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Date: 9.JUN.2025 19:58:37

Out of band emission,Band Edge

FCC Part 22H

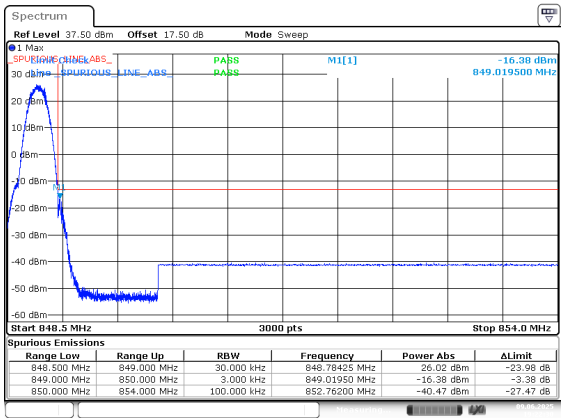
GSM 850, Normal

GSM_Low



ProjectNo.:2502T01066E-RF Tester:Loge Long
Date: 9 JUN.2025 19:20:03

GSM_High

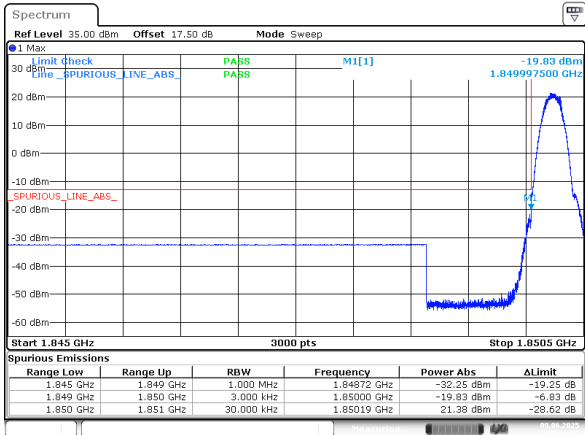


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FCC Part 24E

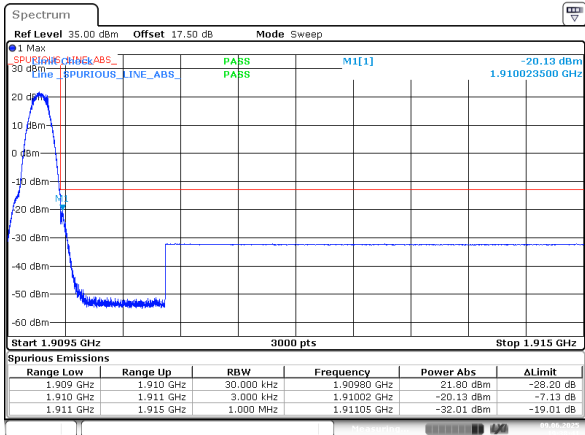
GSM 1900, Normal

GSM_Low



ProjectNo.:2502T01066E-RF Tester:Loge Long
Date: 9.JUN.2025 19:35:03

GSM_High



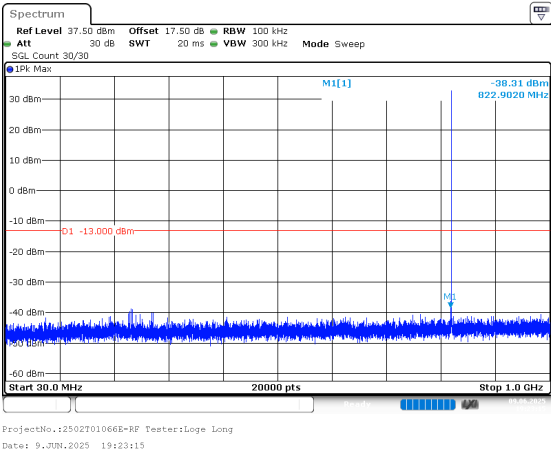
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Date: 9.JUN.2025 19:38:41

Spurious Emissions at Antenna Terminal

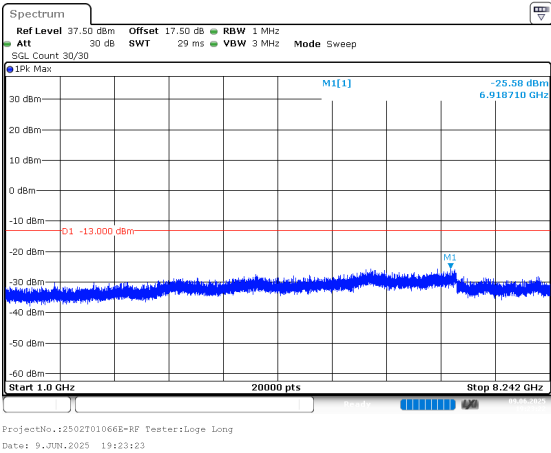
FCC Part 22H
GSM 850, Normal

GSM_Low

Below 1G

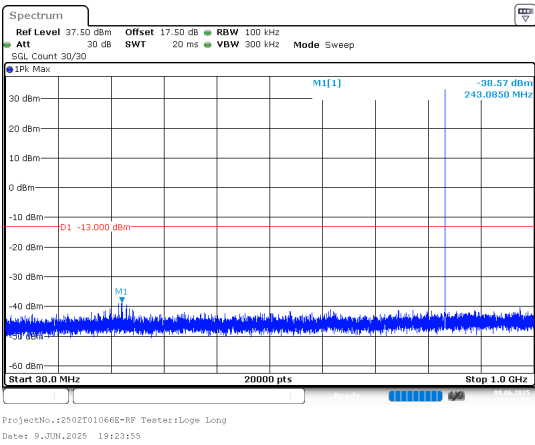


Above 1G

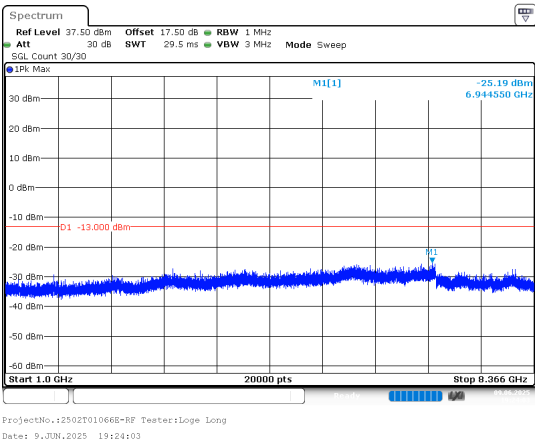


GSM_Middle

Below 1G

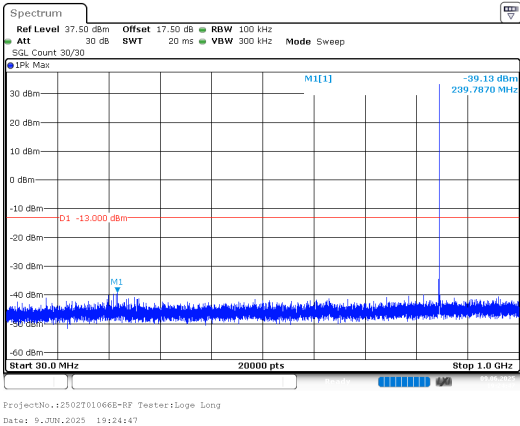


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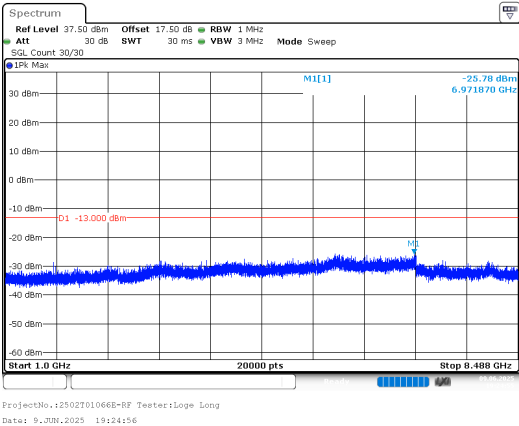


GSM_High

Below 1G



Above 1G

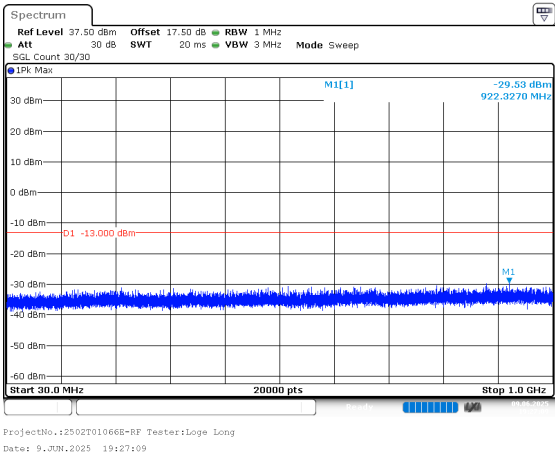


FCC Part 24E

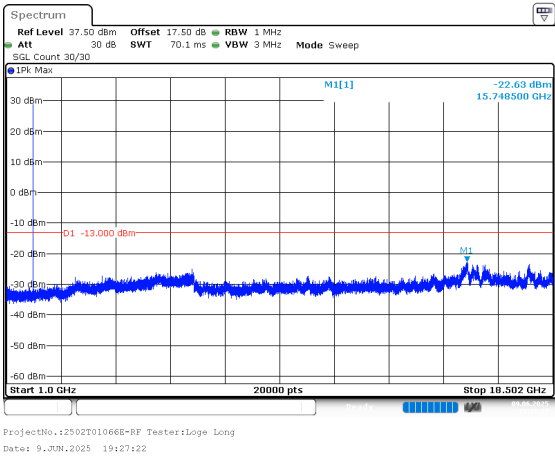
GSM 1900, Normal

GSM_Low

Below 1G

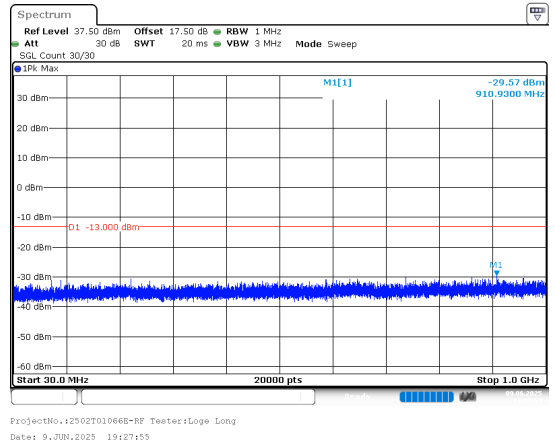


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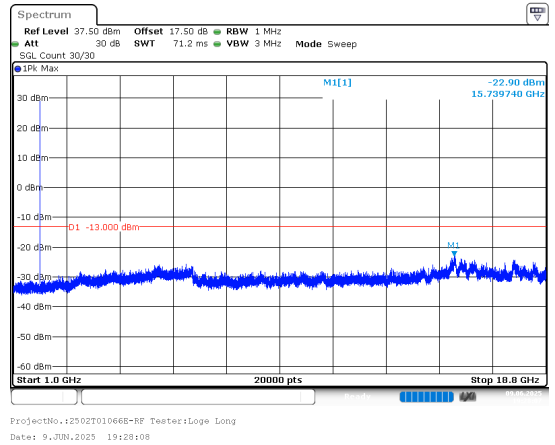


GSM_Middle

Below 1G

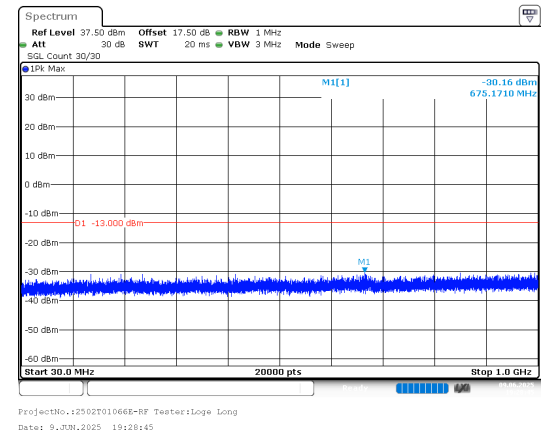


Above 1G

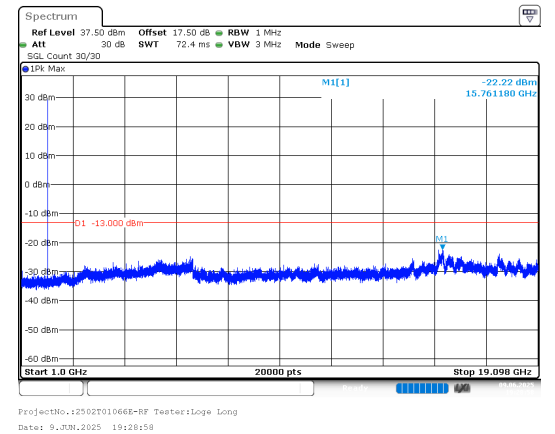


GSM_High

Below 1G



Above 1G



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