

Appendix A

Test Information:

Serial No.:	33NK-2	Test Date:	2025/06/26
Test Site:	RF	Test Mode:	Transmitting
Tester:	Loge Long	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	26.9	Relative Humidity: (%)	63	ATM Pressure: (kPa)	100.9
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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	323308-015	2025/06/01	2026/05/31
Eastsheep	Coaxial Attenuator	5W-N-JK-6G-10dB	F-08-EM502	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)		
GPRS_Middle_TN/VN	836.6	35.7	0.0426	±2.5	Pass
GPRS_Middle_T1/VN	836.6	25.4	0.0304	±2.5	Pass
GPRS_Middle_T2/VN	836.6	24.4	0.0291	±2.5	Pass
GPRS_Middle_T3/VN	836.6	22.4	0.0268	±2.5	Pass
GPRS_Middle_T4/VN	836.6	23.6	0.0282	±2.5	Pass
GPRS_Middle_T5/VN	836.6	23.4	0.0279	±2.5	Pass
GPRS_Middle_T6/VN	836.6	28.6	0.0342	±2.5	Pass
GPRS_Middle_T7/VN	836.6	24.4	0.0292	±2.5	Pass
GPRS_Middle_T8/VN	836.6	8.4	0.0100	±2.5	Pass
GPRS_Middle_TN/VH	836.6	23.0	0.0274	±2.5	Pass
GPRS_Middle_TN/VL	836.6	29.9	0.0358	±2.5	Pass
EDGE_Middle_8PSK_TN/VN	836.6	6.7	0.0080	±2.5	Pass
EDGE_Middle_8PSK_T1/VN	836.6	6.9	0.0083	±2.5	Pass
EDGE_Middle_8PSK_T2/VN	836.6	6.4	0.0076	±2.5	Pass
EDGE_Middle_8PSK_T3/VN	836.6	9.6	0.0115	±2.5	Pass
EDGE_Middle_8PSK_T4/VN	836.6	7.5	0.0090	±2.5	Pass
EDGE_Middle_8PSK_T5/VN	836.6	8.3	0.0099	±2.5	Pass
EDGE_Middle_8PSK_T6/VN	836.6	7.4	0.0088	±2.5	Pass
EDGE_Middle_8PSK_T7/VN	836.6	7.6	0.0091	±2.5	Pass
EDGE_Middle_8PSK_T8/VN	836.6	8.2	0.0098	±2.5	Pass
EDGE_Middle_8PSK_TN/VH	836.6	8.0	0.0095	±2.5	Pass
EDGE_Middle_8PSK_TN/VL	836.6	8.6	0.0102	±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
GPRS_Low_TN/VN	1850.079	1850	Pass
GPRS_Low_T1/VN	1850.079	1850	Pass
GPRS_Low_T2/VN	1850.080	1850	Pass
GPRS_Low_T3/VN	1850.081	1850	Pass
GPRS_Low_T4/VN	1850.079	1850	Pass
GPRS_Low_T5/VN	1850.076	1850	Pass
GPRS_Low_T6/VN	1850.080	1850	Pass
GPRS_Low_T7/VN	1850.080	1850	Pass
GPRS_Low_T8/VN	1850.080	1850	Pass
GPRS_Low_TN/VH	1850.079	1850	Pass
GPRS_Low_TN/VL	1850.086	1850	Pass
GPRS_High_TN/VN	1909.925	1910	Pass
GPRS_High_T1/VN	1909.924	1910	Pass
GPRS_High_T2/VN	1909.929	1910	Pass
GPRS_High_T3/VN	1909.927	1910	Pass
GPRS_High_T4/VN	1909.924	1910	Pass
GPRS_High_T5/VN	1909.924	1910	Pass
GPRS_High_T6/VN	1909.924	1910	Pass
GPRS_High_T7/VN	1909.928	1910	Pass
GPRS_High_T8/VN	1909.929	1910	Pass
GPRS_High_TN/VH	1909.925	1910	Pass
GPRS_High_TN/VL	1909.926	1910	Pass
EDGE_Low_8PSK_TN/VN	1850.084	1850	Pass
EDGE_Low_8PSK_T1/VN	1850.075	1850	Pass
EDGE_Low_8PSK_T2/VN	1850.080	1850	Pass
EDGE_Low_8PSK_T3/VN	1850.078	1850	Pass
EDGE_Low_8PSK_T4/VN	1850.074	1850	Pass
EDGE_Low_8PSK_T5/VN	1850.078	1850	Pass
EDGE_Low_8PSK_T6/VN	1850.078	1850	Pass
EDGE_Low_8PSK_T7/VN	1850.082	1850	Pass

Mode	Result (MHz)	Limit (MHz)	Verdict
EDGE_Low_8PSK_T8/VN	1850.077	1850	Pass
EDGE_Low_8PSK_TN/VH	1850.075	1850	Pass
EDGE_Low_8PSK_TN/VL	1850.083	1850	Pass
EDGE_High_8PSK_TN/VN	1909.927	1910	Pass
EDGE_High_8PSK_T1/VN	1909.925	1910	Pass
EDGE_High_8PSK_T2/VN	1909.928	1910	Pass
EDGE_High_8PSK_T3/VN	1909.925	1910	Pass
EDGE_High_8PSK_T4/VN	1909.923	1910	Pass
EDGE_High_8PSK_T5/VN	1909.925	1910	Pass
EDGE_High_8PSK_T6/VN	1909.925	1910	Pass
EDGE_High_8PSK_T7/VN	1909.932	1910	Pass
EDGE_High_8PSK_T8/VN	1909.923	1910	Pass
EDGE_High_8PSK_TN/VH	1909.929	1910	Pass
EDGE_High_8PSK_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

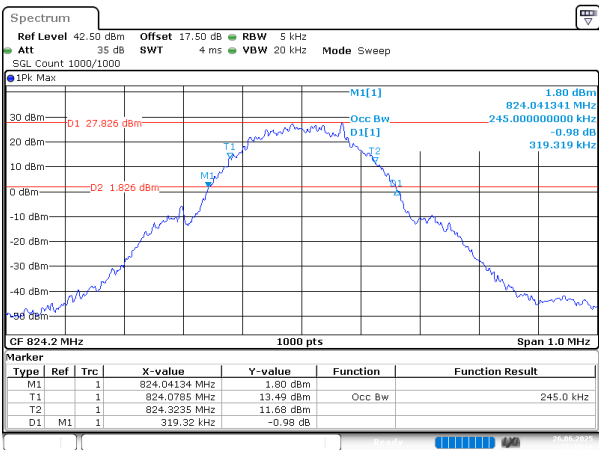
FCC Part 22H

GSM 850, Normal

Mode	99% OBW (MHz)	26dB BW (MHz)
GPRS_Low	0.245	0.319
GPRS_Middle	0.246	0.318
GPRS_High	0.242	0.314
EDGE_Low_8PSK	0.249	0.314
EDGE_Middle_8PSK	0.246	0.312
EDGE_High_8PSK	0.251	0.316

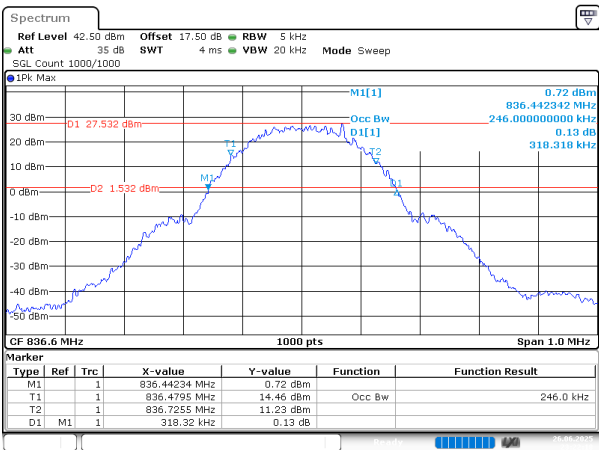
GSM 850, Normal

GPRS_Low



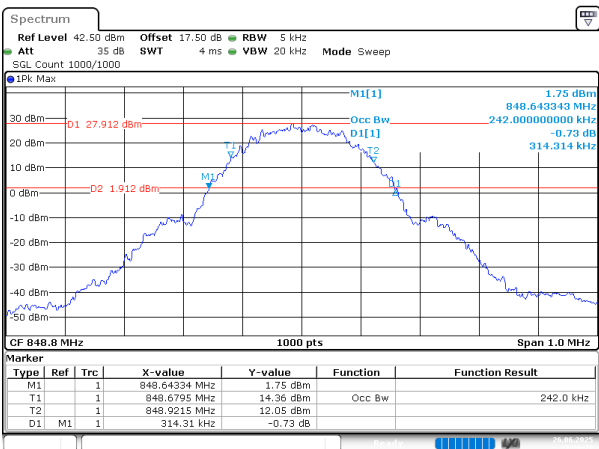
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Date: 26.JUN.2025 23:20:16

GPRS_Middle



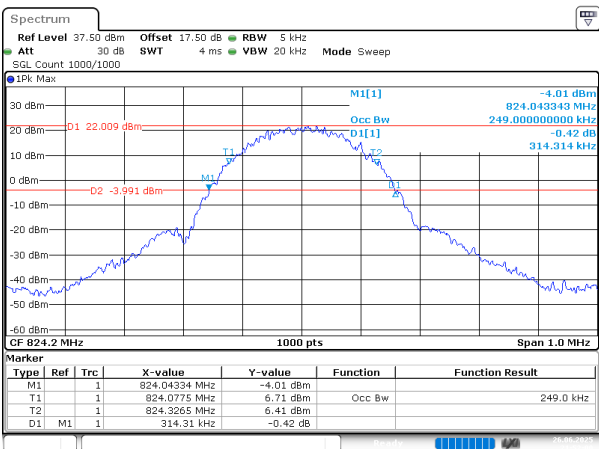
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GPRS_High



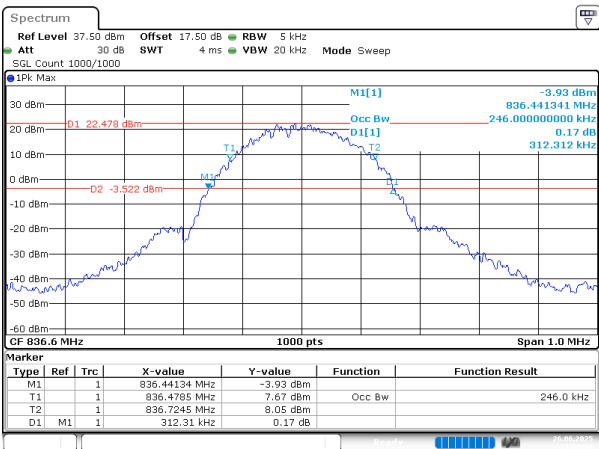
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EDGE_Low_8PSK



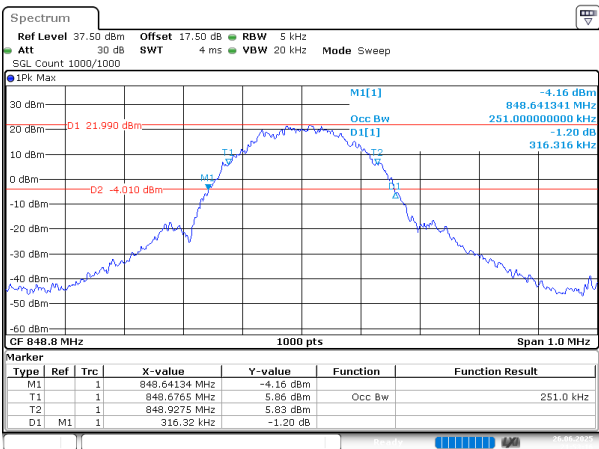
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Date: 26.JUN.2025 21:52:00

EDGE_Middle_8PSK



ProjectNo.:2502T61980E-RF Tester:Loge Long
Date: 26.JUN.2025 21:52:38

EDGE_High_8PSK



ProjectNo.:2502T61980E-RF Tester:Loge Long
Date: 26.JUN.2025 21:53:16

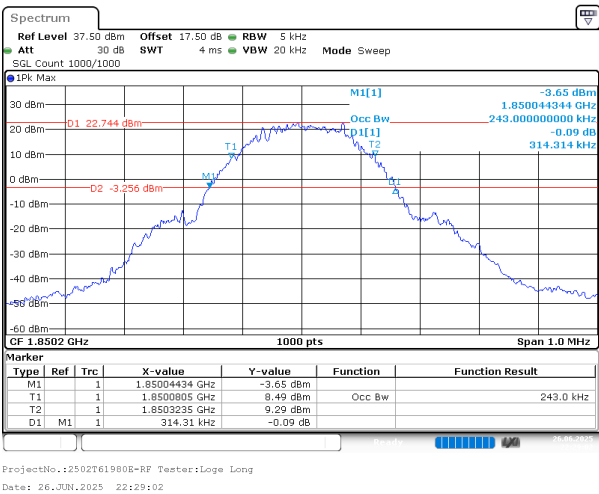
FCC Part 24E

GSM 1900, Normal

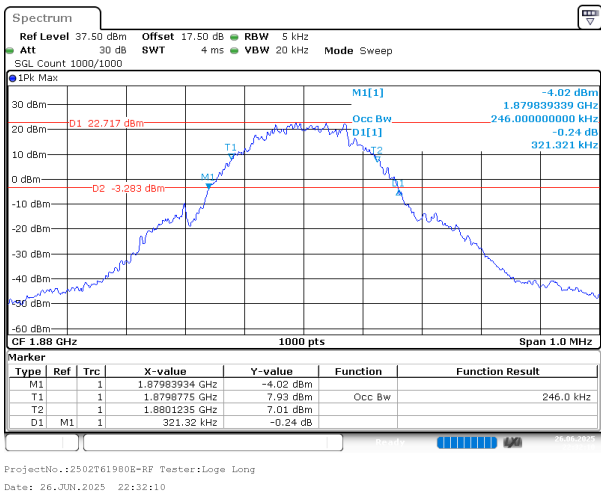
Mode	99% OBW (MHz)	26dB BW (MHz)
GPRS_Low	0.243	0.314
GPRS_Middle	0.246	0.321
GPRS_High	0.244	0.314
EDGE_Low_8PSK	0.243	0.315
EDGE_Middle_8PSK	0.248	0.315
EDGE_High_8PSK	0.251	0.317

GSM 1900, Normal

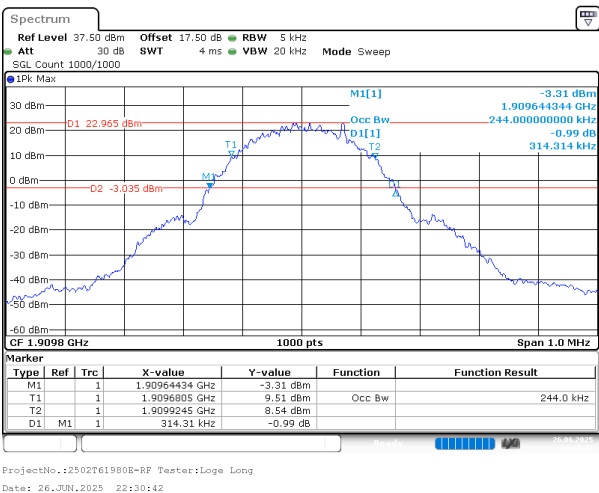
GPRS_Low



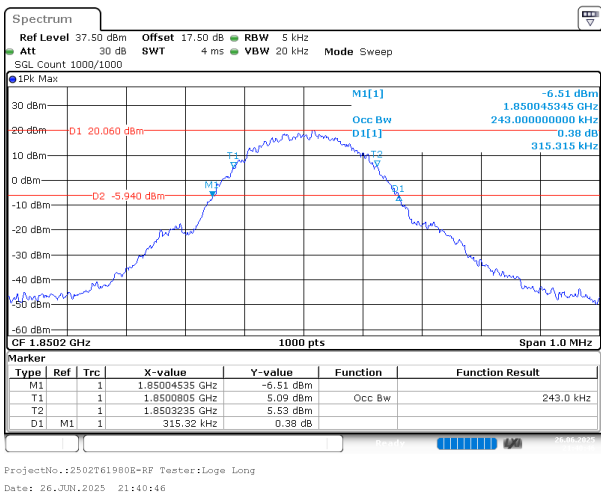
GPRS_Middle



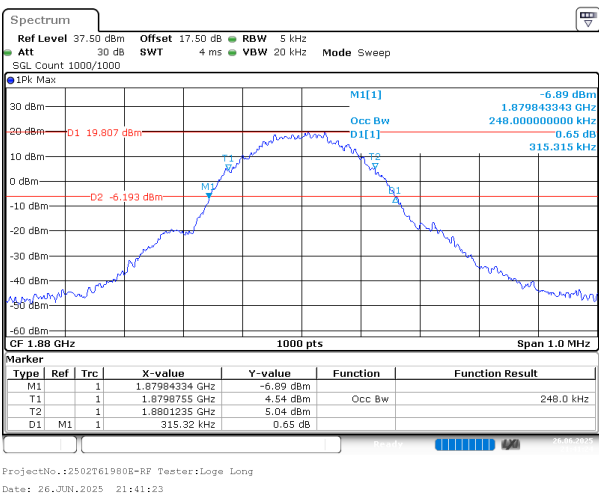
GPRS_High



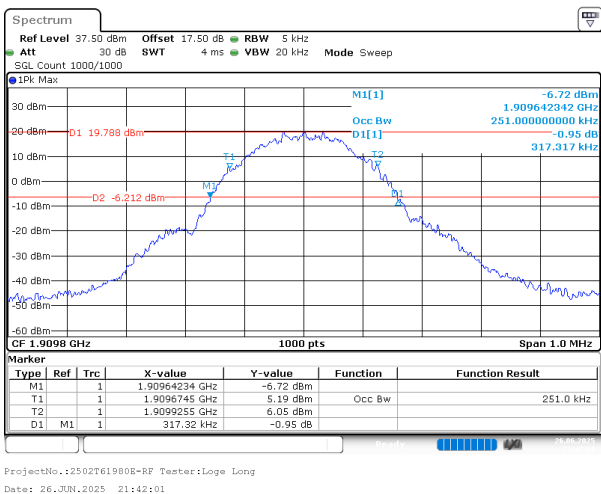
EDGE_Low_8PSK



EDGE_Middle_8PSK



EDGE_High_8PSK



RF Output Power

FCC Part 22H

GSM 850, Normal

Mode	Average Conducted Power (dBm)	ERP (dBm)	Limit (dBm)	Verdict
GPRS_Low_Slot1	32.60	29.86	38.45	Pass
GPRS_Low_Slot2	31.49	28.75	38.45	Pass
GPRS_Low_Slot3	29.33	26.59	38.45	Pass
GPRS_Low_Slot4	28.09	25.35	38.45	Pass
GPRS_Middle_Slot1	32.79	30.05	38.45	Pass
GPRS_Middle_Slot2	31.67	28.93	38.45	Pass
GPRS_Middle_Slot3	29.52	26.78	38.45	Pass
GPRS_Middle_Slot4	28.19	25.45	38.45	Pass
GPRS_High_Slot1	32.64	29.90	38.45	Pass
GPRS_High_Slot2	31.52	28.78	38.45	Pass
GPRS_High_Slot3	29.35	26.61	38.45	Pass
GPRS_High_Slot4	28.01	25.27	38.45	Pass
EDGE_Low_Slot1	27.30	24.56	38.45	Pass
EDGE_Low_Slot2	26.17	23.43	38.45	Pass
EDGE_Low_Slot3	24.05	21.31	38.45	Pass
EDGE_Low_Slot4	22.86	20.12	38.45	Pass
EDGE_Middle_Slot1	27.26	24.52	38.45	Pass
EDGE_Middle_Slot2	26.13	23.39	38.45	Pass
EDGE_Middle_Slot3	24.05	21.31	38.45	Pass
EDGE_Middle_Slot4	22.81	20.07	38.45	Pass
EDGE_High_Slot1	27.30	24.56	38.45	Pass
EDGE_High_Slot2	26.17	23.43	38.45	Pass
EDGE_High_Slot3	24.14	21.40	38.45	Pass
EDGE_High_Slot4	22.89	20.15	38.45	Pass

Note:

ERP = Average Conducted Power(dBm) + Antenna Gain(dBd) - Cable Loss(dB)

Antenna Gain(dBd) = Antenna Gain(dBi) - 2.15

1.Antenna Gain = -0.59dBi;

2.Cable Loss = 0dB.

FCC Part 24E

GSM 1900, Normal

Mode	Average Conducted Power (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
GPRS_Low_Slot1	28.56	26.24	33	Pass
GPRS_Low_Slot2	27.52	25.20	33	Pass
GPRS_Low_Slot3	25.52	23.20	33	Pass
GPRS_Low_Slot4	24.30	21.98	33	Pass
GPRS_Middle_Slot1	28.66	26.34	33	Pass
GPRS_Middle_Slot2	27.60	25.28	33	Pass
GPRS_Middle_Slot3	25.59	23.27	33	Pass
GPRS_Middle_Slot4	24.36	22.04	33	Pass
GPRS_High_Slot1	28.53	26.21	33	Pass
GPRS_High_Slot2	27.41	25.09	33	Pass
GPRS_High_Slot3	25.36	23.04	33	Pass
GPRS_High_Slot4	24.15	21.83	33	Pass
EDGE_Low_Slot1	25.74	23.42	33	Pass
EDGE_Low_Slot2	24.71	22.39	33	Pass
EDGE_Low_Slot3	22.54	20.22	33	Pass
EDGE_Low_Slot4	21.40	19.08	33	Pass
EDGE_Middle_Slot1	25.92	23.60	33	Pass
EDGE_Middle_Slot2	24.84	22.52	33	Pass
EDGE_Middle_Slot3	22.74	20.42	33	Pass
EDGE_Middle_Slot4	21.59	19.27	33	Pass
EDGE_High_Slot1	25.90	23.58	33	Pass
EDGE_High_Slot2	24.71	22.39	33	Pass
EDGE_High_Slot3	22.65	20.33	33	Pass
EDGE_High_Slot4	21.49	19.17	33	Pass

Note:

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

1.Antenna Gain = -2.32dBi;

2.Cable Loss = 0dB.

Peak-to-average Ratio(PAR)

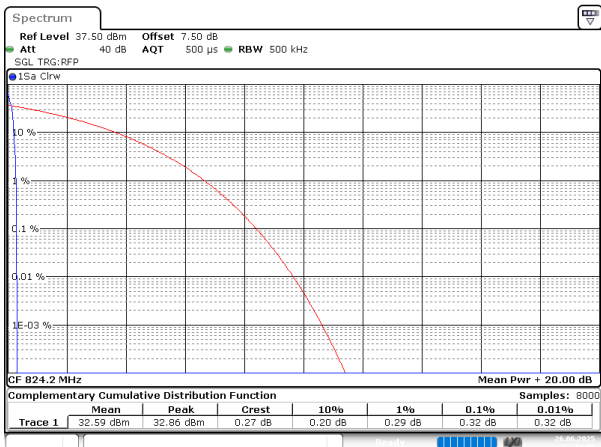
FCC Part 22H

GSM 850, Normal

Mode	Result (dB)	Limit (dB)
GPRS_Low	0.32	13
GPRS_Middle	0.32	13
GPRS_High	0.32	13

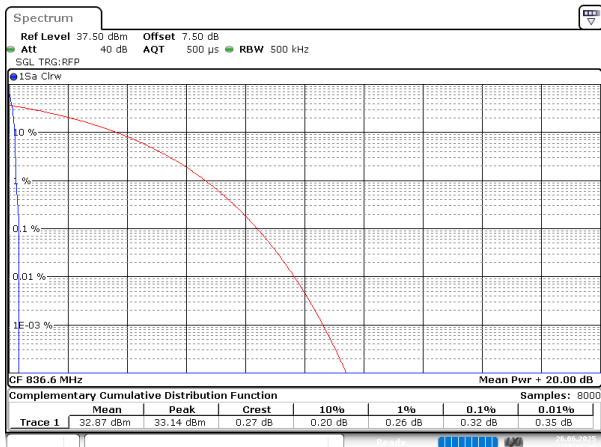
GSM 850, Normal

GPRS_Low



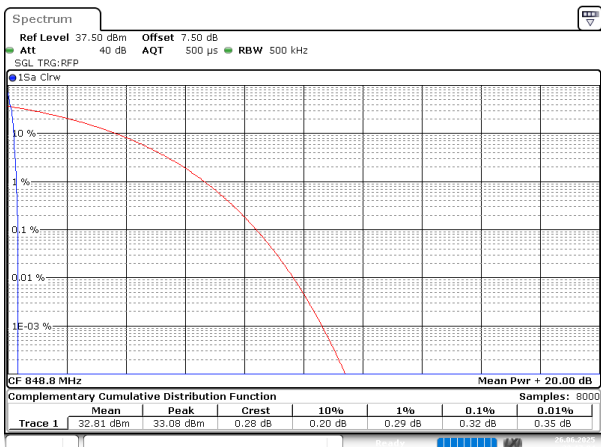
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Date: 26.JUN.2025 22:14:09

GPRS_Middle



ProjectNo.:2502T61980E-RF Tester:Loge Long
Date: 26.JUN.2025 22:15:26

GPRS_High



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Date: 26.JUN.2025 22:17:04

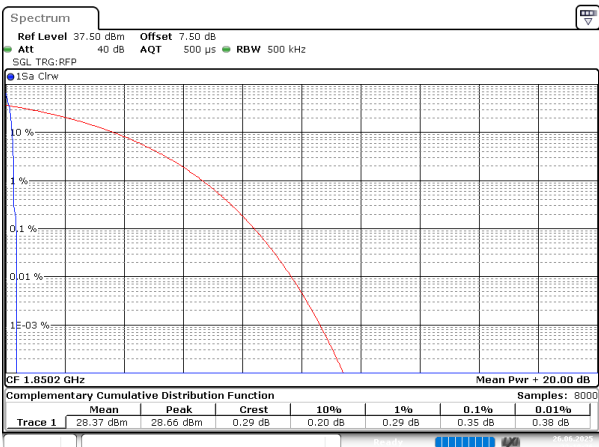
FCC Part 24E

GSM 1900, Normal

Mode	Result (dB)	Limit (dB)
GPRS_Low	0.35	13
GPRS_Middle	0.32	13
GPRS_High	0.32	13

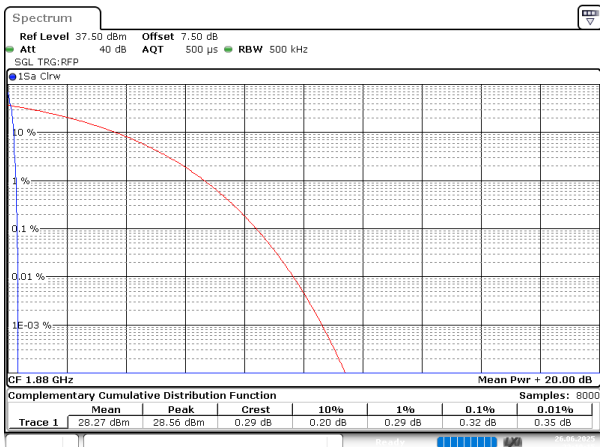
GSM 1900, Normal

GPRS_Low



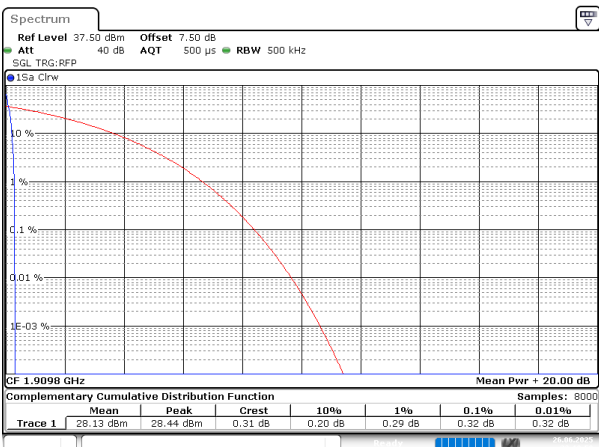
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GPRS_Middle



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GPRS_High



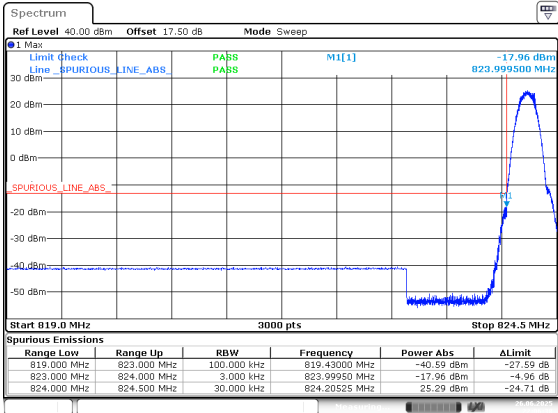
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Out of band emission,Band Edge

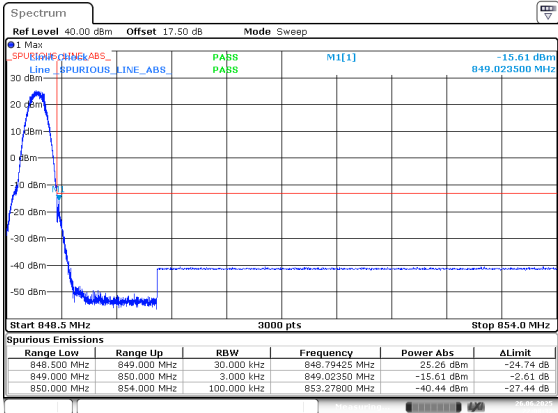
FCC Part 22H

GSM 850, Normal

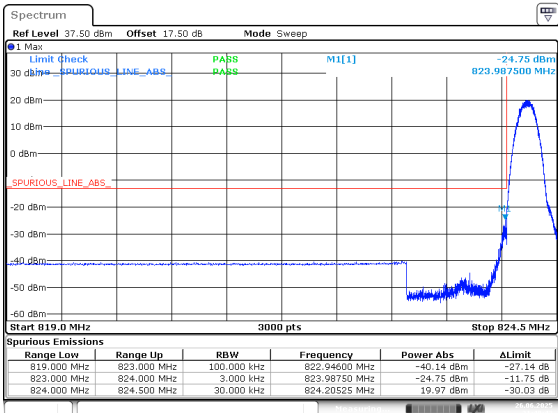
GPRS_Low



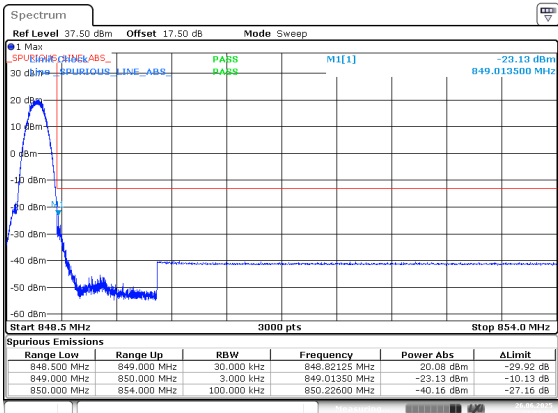
GPRS_High



EDGE_Low_8PSK



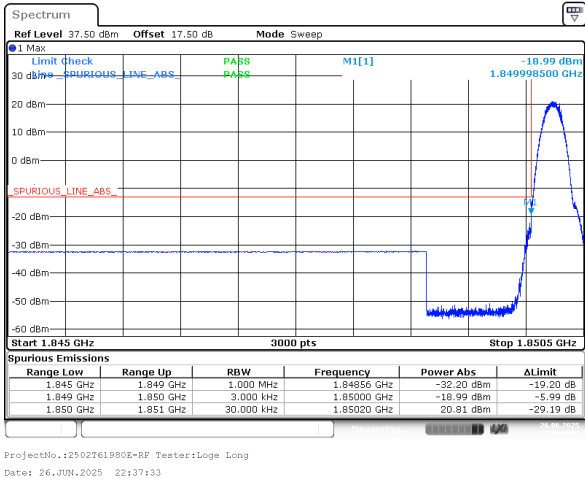
EDGE_High_8PSK



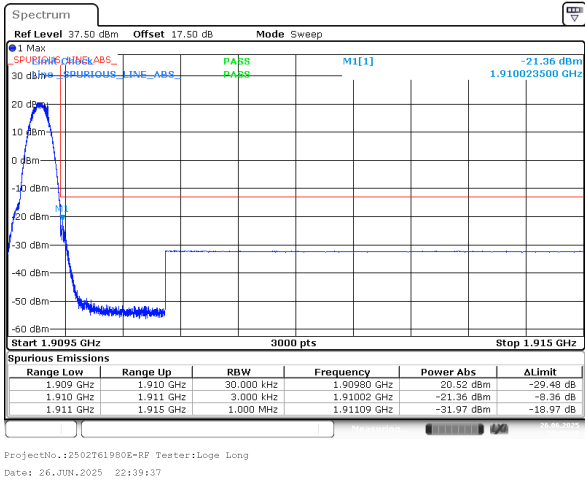
FCC Part 24E

GSM 1900, Normal

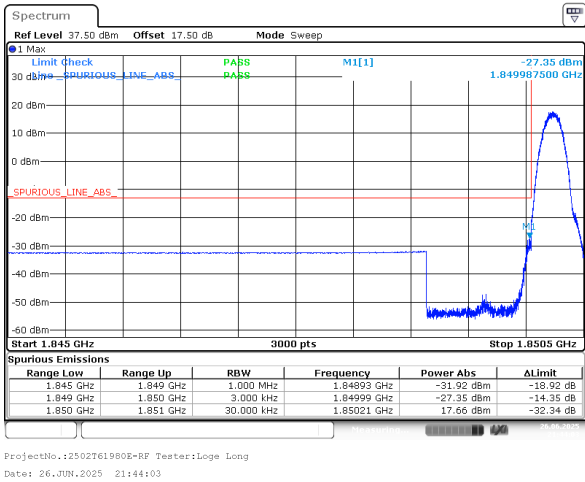
GPRS_Low



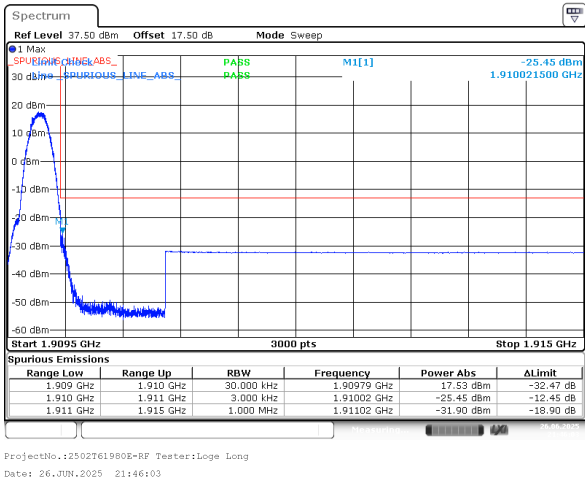
GPRS_High



EDGE_Low_8PSK



EDGE_High_8PSK

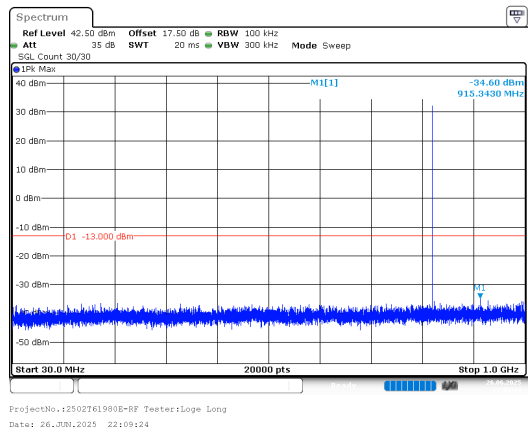


Spurious Emissions at Antenna Terminal

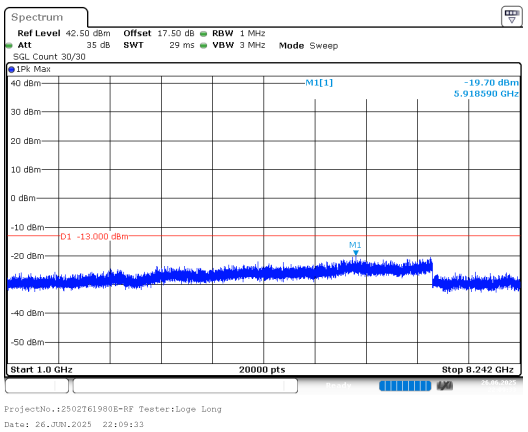
FCC Part 22H
GSM 850, Normal

GPRS_Low

Below 1G

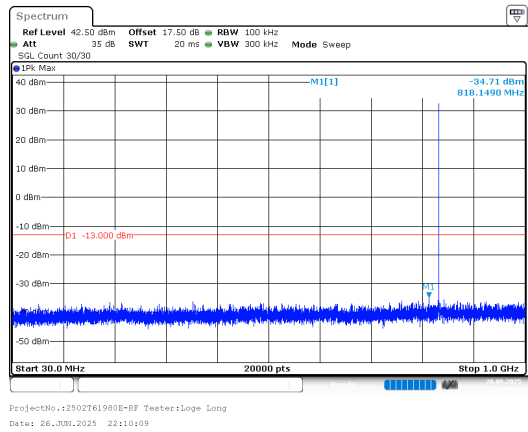


Above 1G

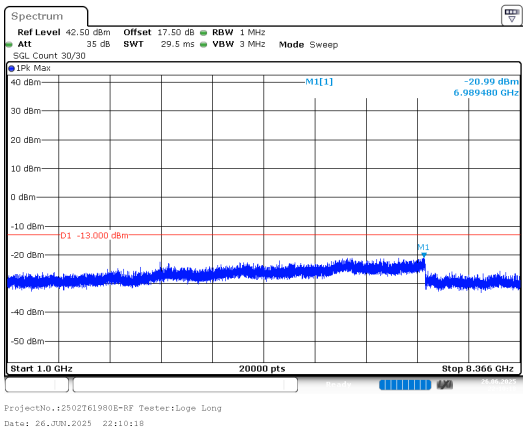


GPRS_Middle

Below 1G

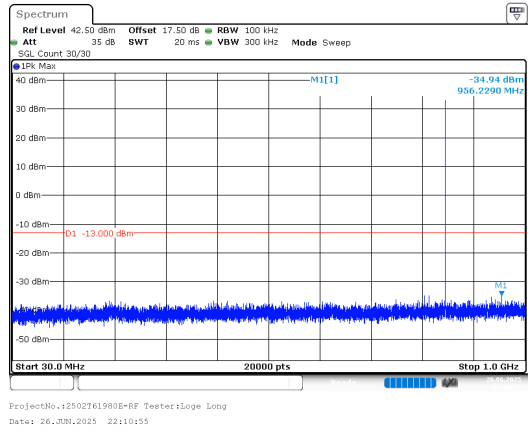


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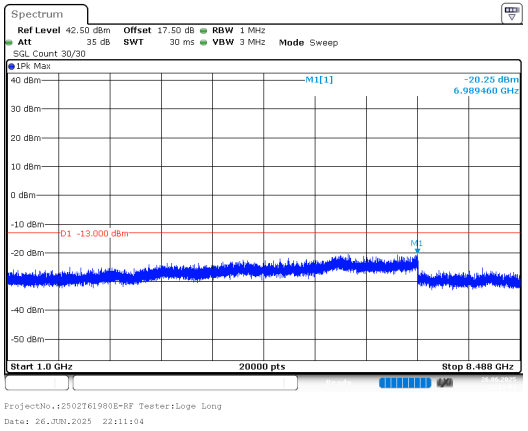


GPRS_High

Below 1G



Above 1G

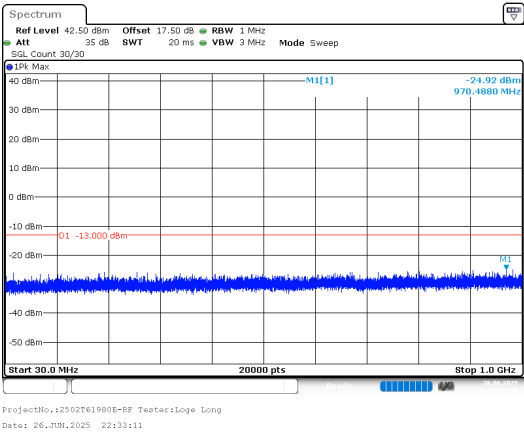


FCC Part 24E

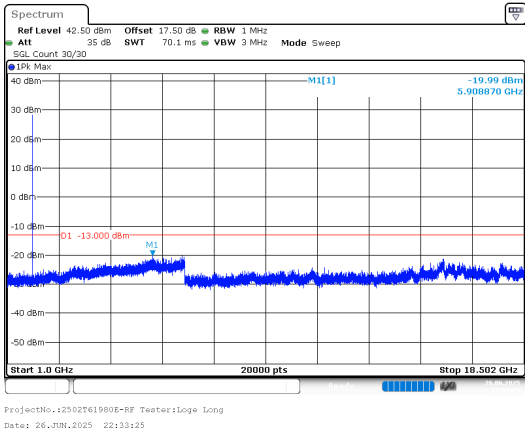
GSM 1900, Normal

GPRS_Low

Below 1G

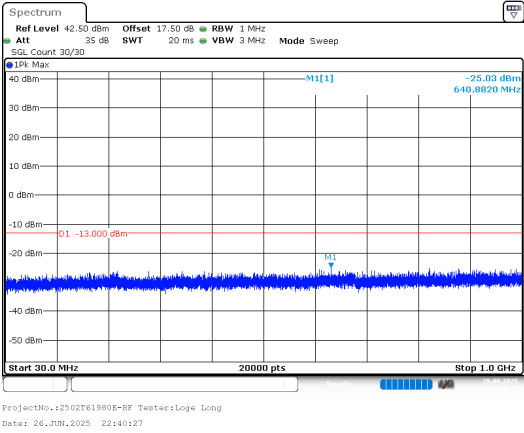


Above 1G

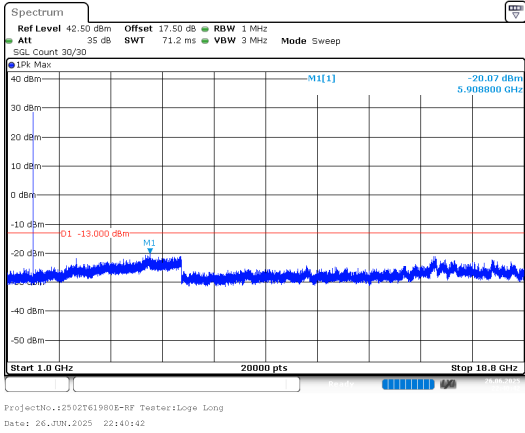


GPRS_Middle

Below 1G

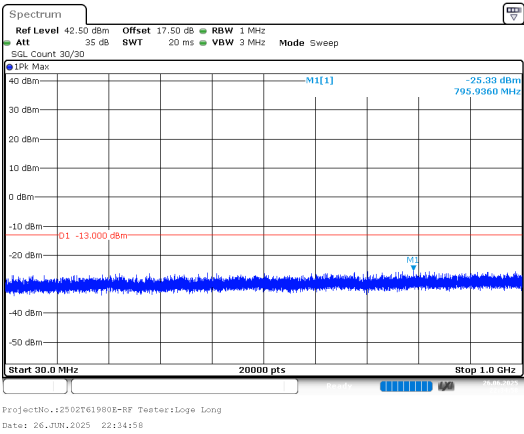


Above 1G

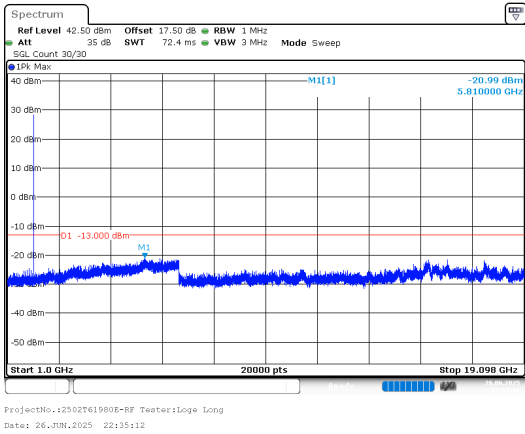


GPRS_High

Below 1G



Above 1G



**** END ****