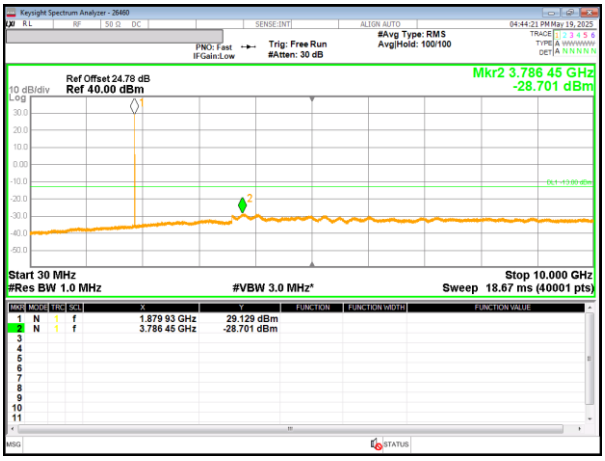
8.5.1. OUT OF BAND EMISSIONS RESULT

GSM 1900 (ANT A)

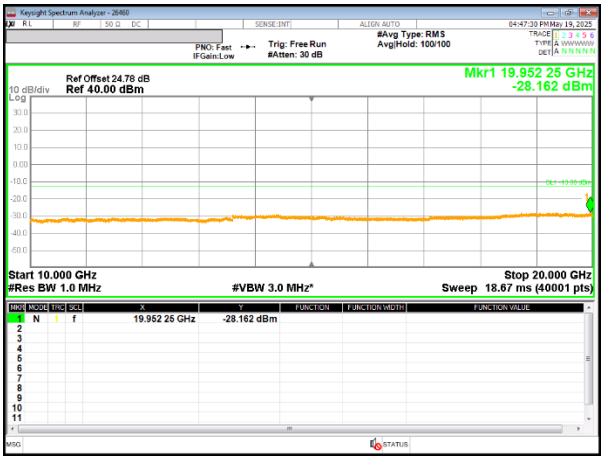
GPRS

Low channel

Low channel

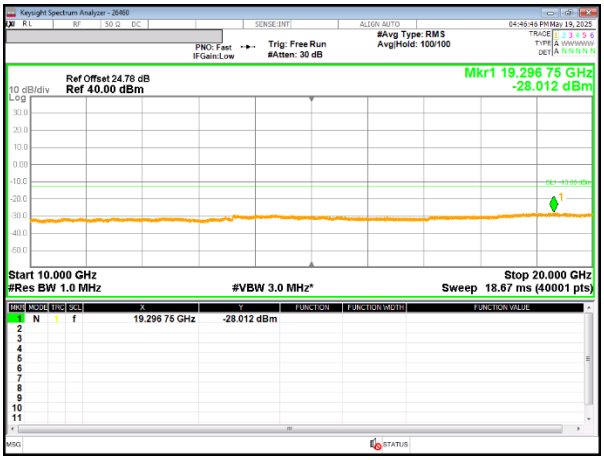


Mid channel



Mid channel

High channel



High channel

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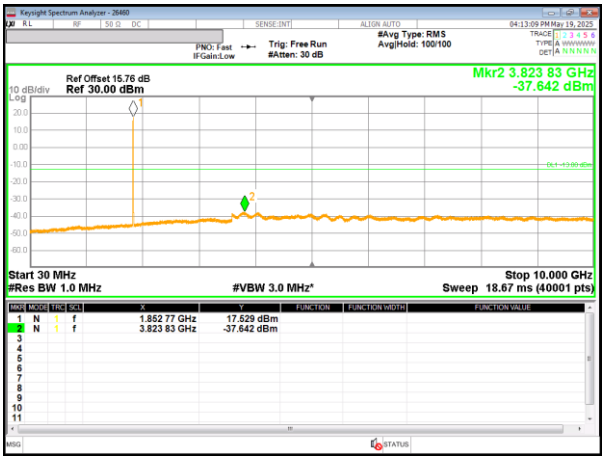
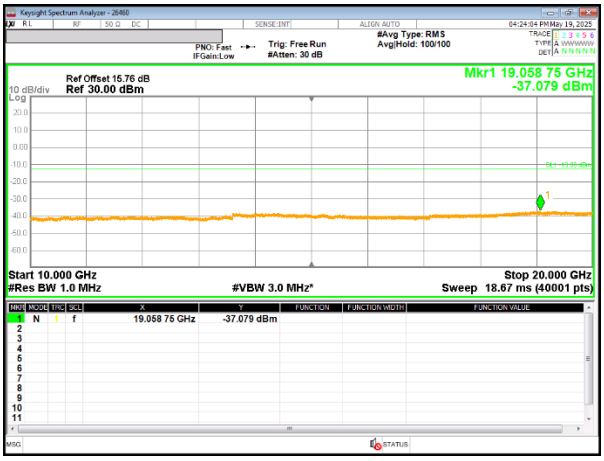
WCDMA Band 2 (ANT A)

REL99

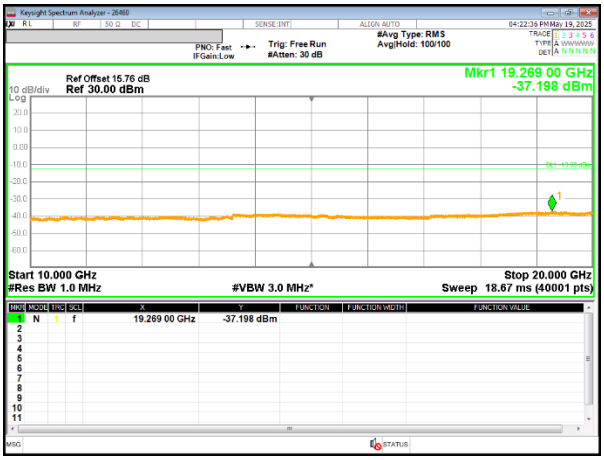


Low channel



Low channel

Mid channel



Mid channel

High channel

High channel

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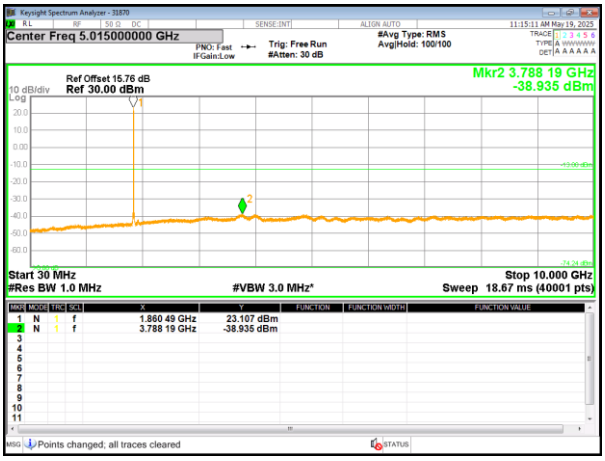
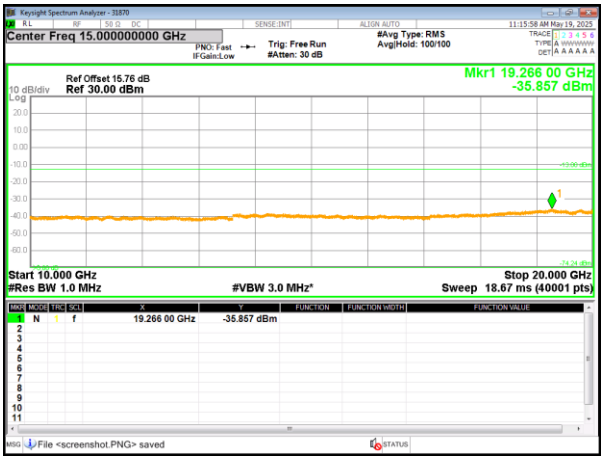
LTE Band 2 (ANT A)

20 MHz QPSK

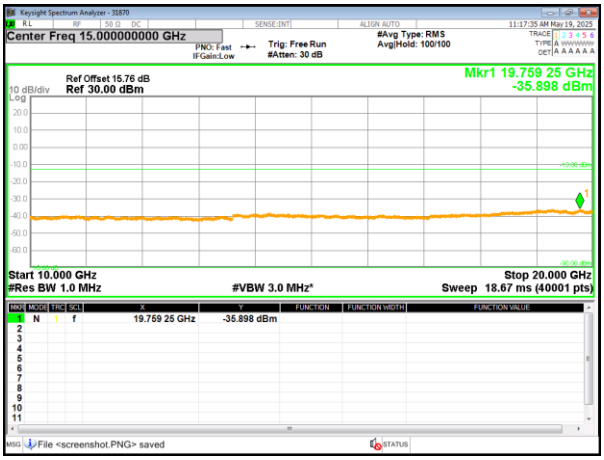


Low channel

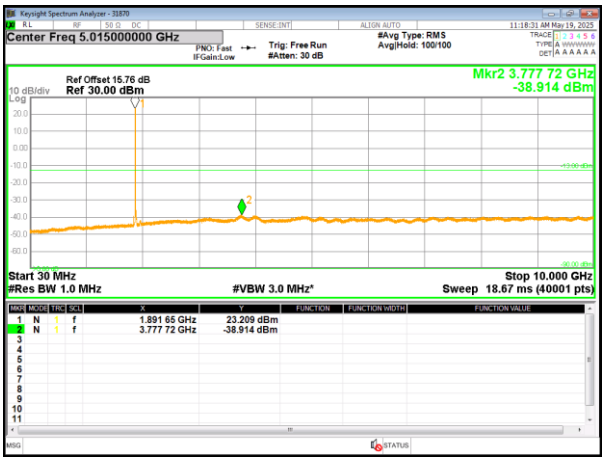


Low channel

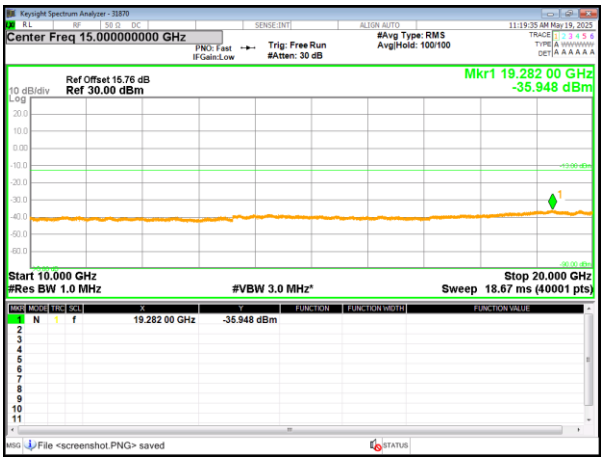
Mid channel



Mid channel



High channel



High channel

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8.6. FREQUENCY STABILITY

RULE PART(S)

FCC: §2.1055, §24.235

LIMITS

§24.235
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

TEST PROCEDURE

Per KDB 971168 D01 Power Meas License Digital Systems v03r01

NOTE

Test were performed each lowest or highest frequency on the modulation condition of more wide bandwidth.(Please refer to OBW results)

RESULTS

See the following pages.

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8.6.1. FREQUENCY STABILITY RESULT

GSM 1900, Channel 512/810, Frequency 1850.0/1910.0 MHz
(Lowest Frequency: EGPRS / Highest Frequency: EGPRS)

Test Date	2025-05-14
Test Engineer	26460

Limit		1850	1910	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	1850.0757	1909.9257		
Extreme (50C)		1850.0758	1909.9258	22.1	0.012
Extreme (40C)		1850.0757	1909.9257	17.8	0.009
Extreme (30C)		1850.0757	1909.9257	16.8	0.009
Extreme (10C)		1850.0757	1909.9257	16.4	0.009
Extreme (0C)		1850.0757	1909.9257	13.2	0.007
Extreme (-10C)		1850.0758	1909.9258	20.2	0.011
Extreme (-20C)		1850.0758	1909.9258	21.9	0.012
Extreme (-30C)		1850.0758	1909.9258	29.6	0.016
20C	15%	1850.0758	1909.9257	15.6	0.008
	-15%	1850.0757	1909.9257	17.5	0.009
	End Point	1850.0757	1909.9257	14.7	0.008

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WCDMA Band 2 (Lowest Frequency: Rel99/ Highest Frequency: HSDPA)

Test Date	2025-05-14
Test Engineer	26460

Limit		1850	1910	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	1850.3102	1909.6890		
Extreme (50C)		1850.3101	1909.6890	-7.4	-0.004
Extreme (40C)		1850.3101	1909.6890	-6.8	-0.004
Extreme (30C)		1850.3101	1909.6890	-5.8	-0.003
Extreme (10C)		1850.3101	1909.6890	-6.3	-0.003
Extreme (0C)		1850.3101	1909.6890	-8.1	-0.004
Extreme (-10C)		1850.3101	1909.6890	-6.9	-0.004
Extreme (-20C)		1850.3101	1909.6890	-8.4	-0.004
Extreme (-30C)		1850.3101	1909.6890	-9.3	-0.005
20C	15%	1850.3101	1909.6890	-6.1	-0.003
	-15%	1850.3101	1909.6890	-5.8	-0.003
	End Point	1850.3101	1909.6890	-6.6	-0.004

LTE Band 2 (Lowest Frequency: QPSK/ Highest Frequency: 16QAM)

Test Date	2025-05-14
Test Engineer	26460

Limit		1850	1910	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ End of OBW	F high @ End of OBW		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	1850.1518	1909.8444		
Extreme (50C)		1850.1518	1909.8444	4.9	0.003
Extreme (40C)		1850.1518	1909.8444	2.7	0.001
Extreme (30C)		1850.1518	1909.8444	5.0	0.003
Extreme (10C)		1850.1518	1909.8444	3.5	0.002
Extreme (0C)		1850.1518	1909.8444	3.1	0.002
Extreme (-10C)		1850.1518	1909.8444	1.9	0.001
Extreme (-20C)		1850.1518	1909.8444	3.7	0.002
Extreme (-30C)		1850.1518	1909.8444	4.4	0.002
20C	15%	1850.1518	1909.8444	2.8	0.001
	-15%	1850.1518	1909.8444	3.1	0.002
	End Point	1850.1518	1909.8444	4.3	0.002

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9. RADIATED RESULTS

9.1. RADIATED POWER (EIRP)

RULE PART(S)

FCC: §2.1046, §24.232

LIMITS

§24.232(c)

Mobile/portable stations are limited to 2 watts e.i.r.p. peak power and the equipment must employ means to limit the power to the minimum necessary for successful communications.

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TEST PROCEDURE

ANSI / TIA / EIA 603 E Clause 2.2.17; ESU40 setting reference to 971168 D01 v03r01

For radiated output power measurement with a ESU40:

a) Set the RBW ≥ 1% to 5% of the OBW;
b) Set VBW ≥ 3 × RBW;
c) Set span ≥ 2 × to 3 × the OBW.;
d) Sweep time = auto couple or Set ≥ [10 × (number of points in sweep) × (transmission period)] for single sweep (automation-compatible) measurement. Transmission period is the on and off time of the transmitter.;
e) Detector = rms;
f) Ensure that the number of measurement points ≥ 2 x span/RBW;
g) Trace mode = average;
h) If the EUT can be configured to transmit continuously, then set the trigger to free run.
i) If the EUT cannot be configured to transmit continuously, then use a sweep trigger with the level set to enable triggering only on full power bursts and configure the EUT to transmit at full power for the entire duration of each sweep. Verify that the sweep time is less than or equal to the transmission burst duration. Time gating can also be used under similar constraints (i.e., configured such that measurement data is collected only during active full-power transmissions).
j) Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple. To accurately determine the average power over multiple symbols, it can be necessary to increase the number of traces to be averaged above 100 or, if using a manually configured sweep time, increase the sweep time.
k) Compute the power by integrating the spectrum across the OBW of the signal using the instrument's band or channel power measurement function, with the band/channel limits set equal to the OBW band edges. If the instrument does not have a band or channel power function, then sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

NOTE

LTE: The OBW value corresponding to the total channel bandwidth is the OBW of FullRB.
Measurements were made with a 1RB configuration (Worst case) over the entire channel bandwidth, and FRB configurations were also reported for the worst BW.

TEST RESULTS

See the following pages.

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9.1.1. EIRP RESULT

GSM (ANT A)

Band	Mode	Frequency (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)
GSM 1900	GPRS	1850.20	24.37	H	4.50	9.48	29.35	860.99	33.00	-3.65
		1880.00	25.91	H	4.53	9.20	30.58	1142.88	33.00	-2.42
		1909.80	25.69	H	4.57	8.86	29.98	995.41	33.00	-3.02
	EGPRS	1850.20	20.58	H	4.50	9.48	25.57	360.58	33.00	-7.43
		1880.00	21.57	H	4.53	9.20	26.24	420.73	33.00	-6.76
		1909.80	21.42	H	4.57	8.86	25.71	372.39	33.00	-7.29

WCDMA Band 2 (ANT A)

Band	Mode	Frequency (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)
Band 2	REL99	1852.40	18.35	H	4.50	9.46	23.31	214.29	33.00	-9.69
		1880.00	19.04	H	4.53	9.20	23.71	234.96	33.00	-9.29
		1907.60	19.14	H	4.56	8.89	23.47	222.33	33.00	-9.53
	HSUPA	1852.40	18.30	H	4.50	9.46	23.26	211.84	33.00	-9.74
		1880.00	18.85	H	4.53	9.20	23.52	224.91	33.00	-9.48
		1907.60	18.94	H	4.56	8.89	23.27	212.32	33.00	-9.73

LTE Band 2 (ANT A)

BW (MHz)	Modulation	Frequency (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)	RB
20	QPSK	1860.00	19.79	H	4.51	9.39	24.67	293.09	33.00	-8.33	1/49
		1880.00	19.40	H	4.53	9.20	24.07	255.27	33.00	-8.93	1/49
		1900.00	21.00	H	4.55	9.01	25.45	350.75	33.00	-7.55	1/0
	16-QAM	1860.00	18.67	H	4.51	9.39	23.55	226.46	33.00	-9.45	1/99
		1880.00	18.42	H	4.53	9.20	23.09	203.70	33.00	-9.91	1/49
		1900.00	19.93	H	4.55	9.01	24.38	274.16	33.00	-8.62	1/0
15	QPSK	1857.50	19.50	H	4.50	9.41	24.41	276.06	33.00	-8.59	1/37
		1880.00	19.31	H	4.53	9.20	23.98	250.03	33.00	-9.02	1/37
		1902.50	20.86	H	4.56	8.97	25.27	336.51	33.00	-7.73	1/0
	16-QAM	1857.50	18.00	H	4.50	9.41	22.91	195.43	33.00	-10.09	1/0
		1880.00	18.31	H	4.53	9.20	22.98	198.61	33.00	-10.02	1/37
		1902.50	19.79	H	4.56	8.97	24.20	263.03	33.00	-8.80	1/74
10	QPSK	1855.00	19.23	H	4.50	9.43	24.16	260.62	33.00	-8.84	1/49
		1880.00	19.34	H	4.53	9.20	24.01	251.77	33.00	-8.99	1/0
		1905.00	20.68	H	4.56	8.93	25.05	319.89	33.00	-7.95	1/0
	16-QAM	1855.00	17.76	H	4.50	9.43	22.69	185.78	33.00	-10.31	1/0
		1880.00	18.23	H	4.53	9.20	22.90	194.98	33.00	-10.10	1/49
		1905.00	19.72	H	4.56	8.93	24.09	256.45	33.00	-8.91	1/49
5	QPSK	1852.50	19.16	H	4.50	9.46	24.12	258.23	33.00	-8.88	1/12
		1880.00	19.54	H	4.53	9.20	24.21	263.63	33.00	-8.79	1/12
		1907.50	20.64	H	4.56	8.89	24.97	314.05	33.00	-8.03	1/12
	16-QAM	1852.50	17.81	H	4.50	9.46	22.77	189.23	33.00	-10.23	1/0
		1880.00	18.11	H	4.53	9.20	22.78	189.67	33.00	-10.22	1/24
		1907.50	19.20	H	4.56	8.89	23.53	225.42	33.00	-9.47	1/12
3	QPSK	1851.50	19.04	H	4.50	9.47	24.01	251.77	33.00	-8.99	1/14
		1880.00	19.31	H	4.53	9.20	23.98	250.03	33.00	-9.02	1/14
		1908.50	20.54	H	4.56	8.88	24.85	305.49	33.00	-8.15	1/0
	16-QAM	1851.50	18.14	H	4.50	9.47	23.11	204.64	33.00	-9.89	1/0
		1880.00	18.39	H	4.53	9.20	23.06	202.30	33.00	-9.94	1/8
		1908.50	19.57	H	4.56	8.88	23.88	244.34	33.00	-9.12	1/8
1.4	QPSK	1850.70	19.07	H	4.50	9.48	24.05	254.10	33.00	-8.95	1/3
		1880.00	19.36	H	4.53	9.20	24.03	252.93	33.00	-8.97	1/3
		1909.30	20.53	H	4.57	8.87	24.83	304.09	33.00	-8.17	1/3
	16-QAM	1850.70	18.27	H	4.50	9.48	23.25	211.35	33.00	-9.75	1/0
		1880.00	18.19	H	4.53	9.20	22.86	193.20	33.00	-10.14	1/0
		1909.30	19.53	H	4.57	8.87	23.83	241.55	33.00	-9.17	1/5
20	QPSK	1860.00	18.74	H	4.51	9.39	23.62	230.14	33.00	-9.38	100/0
		1880.00	18.42	H	4.53	9.20	23.09	203.70	33.00	-9.91	100/0
		1900.00	19.95	H	4.55	9.01	24.40	275.42	33.00	-8.60	100/0
	16-QAM	1860.00	17.64	H	4.51	9.39	22.52	178.65	33.00	-10.48	100/0
		1880.00	17.37	H	4.53	9.20	22.04	159.96	33.00	-10.96	100/0
		1900.00	18.78	H	4.55	9.01	23.23	210.38	33.00	-9.77	100/0

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LTE Band 2 (ANT C)

BW (MHz)	Modulation	Frequency (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)	RB
20	QPSK	1860.00	12.47	V	4.51	9.39	17.35	54.33	33.00	-15.65	1/99
		1880.00	12.84	V	4.53	9.20	17.51	56.36	33.00	-15.49	1/49
		1900.00	13.43	V	4.55	9.01	17.89	61.52	33.00	-15.11	1/0
	16-QAM	1860.00	11.23	V	4.51	9.39	16.11	40.83	33.00	-16.89	1/99
		1880.00	11.76	V	4.53	9.20	16.43	43.95	33.00	-16.57	1/49
		1900.00	12.60	V	4.55	9.01	17.06	50.82	33.00	-15.94	1/0
15	QPSK	1857.50	12.39	V	4.50	9.41	17.30	53.70	33.00	-15.70	1/37
		1880.00	12.87	V	4.53	9.20	17.54	56.75	33.00	-15.46	1/37
		1902.50	13.41	V	4.56	8.97	17.83	60.67	33.00	-15.17	1/0
	16-QAM	1857.50	10.96	V	4.50	9.41	15.87	38.64	33.00	-17.13	1/0
		1880.00	11.57	V	4.53	9.20	16.24	42.07	33.00	-16.76	1/74
		1902.50	12.47	V	4.56	8.97	16.89	48.87	33.00	-16.11	1/0
10	QPSK	1855.00	12.03	V	4.50	9.43	16.96	49.66	33.00	-16.04	1/49
		1880.00	12.59	V	4.53	9.20	17.26	53.21	33.00	-15.74	1/0
		1905.00	13.09	V	4.56	8.93	17.46	55.72	33.00	-15.54	1/0
	16-QAM	1855.00	10.62	V	4.50	9.43	15.55	35.89	33.00	-17.45	1/25
		1880.00	11.66	V	4.53	9.20	16.33	42.95	33.00	-16.67	1/49
		1905.00	12.11	V	4.56	8.93	16.48	44.46	33.00	-16.52	1/0
5	QPSK	1852.50	11.82	V	4.50	9.46	16.78	47.64	33.00	-16.22	1/12
		1880.00	12.58	V	4.53	9.20	17.25	53.09	33.00	-15.75	1/12
		1907.50	13.08	V	4.56	8.89	17.41	55.08	33.00	-15.59	1/12
	16-QAM	1852.50	10.43	V	4.50	9.46	15.39	34.59	33.00	-17.61	1/12
		1880.00	11.61	V	4.53	9.20	16.28	42.46	33.00	-16.72	1/0
		1907.50	11.96	V	4.56	8.89	16.29	42.56	33.00	-16.71	1/24
3	QPSK	1851.50	11.64	V	4.50	9.47	16.61	45.81	33.00	-16.39	1/8
		1880.00	12.48	V	4.53	9.20	17.15	51.88	33.00	-15.85	1/14
		1908.50	12.92	V	4.56	8.88	17.24	52.97	33.00	-15.76	1/14
	16-QAM	1851.50	10.35	V	4.50	9.47	15.32	34.04	33.00	-17.68	1/0
		1880.00	11.36	V	4.53	9.20	16.03	40.09	33.00	-16.97	1/0
		1908.50	11.93	V	4.56	8.88	16.25	42.17	33.00	-16.75	1/0
1.4	QPSK	1850.70	11.70	V	4.50	9.48	16.68	46.56	33.00	-16.32	1/5
		1880.00	12.48	V	4.53	9.20	17.15	51.88	33.00	-15.85	1/5
		1909.30	12.94	V	4.57	8.87	17.24	52.97	33.00	-15.76	1/5
	16-QAM	1850.70	10.58	V	4.50	9.48	15.56	35.97	33.00	-17.44	1/5
		1880.00	11.55	V	4.53	9.20	16.22	41.88	33.00	-16.78	1/5
		1909.30	12.13	V	4.57	8.87	16.43	43.95	33.00	-16.57	1/0
20	QPSK	1860.00	11.57	V	4.51	9.39	16.45	44.16	33.00	-16.55	100/0
		1880.00	11.81	V	4.53	9.20	16.48	44.46	33.00	-16.52	100/0
		1900.00	12.34	V	4.55	9.01	16.80	47.86	33.00	-16.20	100/0
	16-QAM	1860.00	10.27	V	4.51	9.39	15.15	32.73	33.00	-17.85	100/0
		1880.00	10.91	V	4.53	9.20	15.58	36.14	33.00	-17.42	100/0
		1900.00	11.54	V	4.55	9.01	16.00	39.81	33.00	-17.00	100/0

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9.2. RADIATIED SPURIOUS EMISSION

RULE PART(S)

FCC: §2.1053, §24.238

LIMIT

24.238(a)
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.

TEST PROCEDURE

ANSI / TIA / EIA 603 E Clause 2.2.12; ESU40 setting reference to 971168 D01 v03r01

For peak power measurement with a ESU40:

a) Set the RBW = 1 MHz for emissions above 1 GHz
b) Set VBW ≥ 3 × RBW;
c) Set span ≥ 1.5 times the OBW;
d) Sweep time = auto couple or Set ≥ [10 × (number of points in sweep) × (transmission period)] for single sweep (automation-compatible) measurement. Transmission period is the on and off time of the transmitter.
e) Detector = rms;
f) Ensure that the number of measurement points ≥ 2 x span/RBW;
g) Trace Mode = average(WCDMA, LTE), Maxhold(GSM);

NOTE1

GSM : It was tested at GPRS as worst case (the highst output power and density).
UMTS: It was tested at REL 99 as worst case (the highst output power and density).
LTE: It was tested at 1RB QPSK as worst case (the highst output power and density).

NOTE2

Please refer to section 5.4 for bandwidth and RB setting about LTE bands.

RESULTS

See the following pages.

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9.2.1. SPURIOUS RADIATION RESULT

GSM1900

GPRS

ANT A

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company:	Samsung
Project #:	4791754791
Date:	2025-05-14
Test Engineer:	27089
Configuration:	EUT / AC Adapter, Y-Position
Location:	Chamber 2
Mode:	GPRS 1900 MHz Harmonics
Test Votage:	AC 120 V, 60 Hz

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1850.2MHz									
3700.40	-9.4	V	3.0	43.1	1.0	-51.4	-13.0	-38.4	
5550.60	-6.6	V	3.0	43.4	1.0	-49.0	-13.0	-36.0	
7400.80	-4.3	V	3.0	43.0	1.0	-46.3	-13.0	-33.3	
3700.40	-9.0	H	3.0	43.1	1.0	-51.1	-13.0	-38.1	
5550.60	-7.3	H	3.0	43.4	1.0	-49.7	-13.0	-36.7	
7400.80	-4.5	H	3.0	43.0	1.0	-46.5	-13.0	-33.5	
Mid Ch, 1880MHz									
3760.00	-9.2	V	3.0	43.1	1.0	-51.3	-13.0	-38.3	
5640.00	-6.3	V	3.0	43.4	1.0	-48.7	-13.0	-35.7	
7520.00	-4.1	V	3.0	42.9	1.0	-46.0	-13.0	-33.0	
3760.00	-8.3	H	3.0	43.1	1.0	-50.4	-13.0	-37.4	
5640.00	-6.3	H	3.0	43.4	1.0	-48.7	-13.0	-35.7	
7520.00	-4.4	H	3.0	42.9	1.0	-46.3	-13.0	-33.3	
High Ch, 1909.8MHz									
3819.60	-9.2	V	3.0	43.1	1.0	-51.3	-13.0	-38.3	
5729.40	-6.4	V	3.0	43.4	1.0	-48.9	-13.0	-35.9	
7639.20	-4.2	V	3.0	42.9	1.0	-46.1	-13.0	-33.1	
3819.60	-8.7	H	3.0	43.1	1.0	-50.8	-13.0	-37.8	
5729.40	-6.5	H	3.0	43.4	1.0	-49.0	-13.0	-36.0	
7639.20	-4.4	H	3.0	42.9	1.0	-46.3	-13.0	-33.3	

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WCDMA Band 2

REL99

ANT A

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company:	Samsung
Project #:	4791754791
Date:	2025-05-14
Test Engineer:	27089
Configuration:	EUT / AC Adapter, X-Position
Location:	Chamber 2
Mode:	Rel99 Band 2 Harmonics
Test Votage:	AC 120 V, 60 Hz

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1852.4MHz									
3704.80	-10.7	V	3.0	43.1	1.0	-52.7	-13.0	-39.7	
5557.20	-7.7	V	3.0	43.4	1.0	-50.1	-13.0	-37.1	
7409.60	-5.4	V	3.0	43.0	1.0	-47.4	-13.0	-34.4	
3704.80	-10.4	H	3.0	43.1	1.0	-52.4	-13.0	-39.4	
5557.20	-7.8	H	3.0	43.4	1.0	-50.2	-13.0	-37.2	
7409.60	-5.6	H	3.0	43.0	1.0	-47.6	-13.0	-34.6	
Mid Ch, 1880MHz									
3760.00	-10.5	V	3.0	43.1	1.0	-52.6	-13.0	-39.6	
5640.00	-7.3	V	3.0	43.4	1.0	-49.7	-13.0	-36.7	
7520.00	-5.4	V	3.0	42.9	1.0	-47.3	-13.0	-34.3	
3760.00	-10.2	H	3.0	43.1	1.0	-52.3	-13.0	-39.3	
5640.00	-7.5	H	3.0	43.4	1.0	-50.0	-13.0	-37.0	
7520.00	-5.6	H	3.0	42.9	1.0	-47.5	-13.0	-34.5	
High Ch, 1907.6MHz									
3815.20	-10.3	V	3.0	43.1	1.0	-52.4	-13.0	-39.4	
5722.80	-7.6	V	3.0	43.4	1.0	-50.0	-13.0	-37.0	
7630.40	-5.3	V	3.0	42.9	1.0	-47.2	-13.0	-34.2	
3815.20	-10.1	H	3.0	43.1	1.0	-52.2	-13.0	-39.2	
5722.80	-7.7	H	3.0	43.4	1.0	-50.2	-13.0	-37.2	
7630.40	-5.5	H	3.0	42.9	1.0	-47.4	-13.0	-34.4	

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LTE Band 2

20 MHz
QPSK
ANT A

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 4791754791
Date: 2025-05-15
Test Engineer: 24542
Configuration: EUT / AC Adapter, X-Position
Location: Chamber 1
Mode: LTE_QPSK Band 2 Harmonics, 20MHz Bandwidth
Test Votage: AC 120 V, 60 Hz

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1860MHz									
3720.00	-7.8	V	3.0	44.3	1.0	-51.0	-13.0	-38.0	
5580.00	-5.3	V	3.0	44.6	1.0	-49.0	-13.0	-36.0	
7440.00	-2.2	V	3.0	44.8	1.0	-46.0	-13.0	-33.0	
3720.00	-7.9	H	3.0	44.3	1.0	-51.1	-13.0	-38.1	
5580.00	-5.2	H	3.0	44.6	1.0	-48.8	-13.0	-35.8	
7440.00	-2.2	H	3.0	44.8	1.0	-46.0	-13.0	-33.0	
Mid Ch, 1880MHz									
3760.00	-7.8	V	3.0	44.3	1.0	-51.1	-13.0	-38.1	
5640.00	-5.0	V	3.0	44.7	1.0	-48.7	-13.0	-35.7	
7520.00	-2.2	V	3.0	44.7	1.0	-45.9	-13.0	-32.9	
3760.00	-7.8	H	3.0	44.3	1.0	-51.1	-13.0	-38.1	
5640.00	-5.2	H	3.0	44.7	1.0	-48.8	-13.0	-35.8	
7520.00	-2.2	H	3.0	44.7	1.0	-45.9	-13.0	-32.9	
High Ch, 1900MHz									
3800.00	-7.5	V	3.0	44.4	1.0	-50.9	-13.0	-37.9	
5700.00	-5.1	V	3.0	44.7	1.0	-48.8	-13.0	-35.8	
7600.00	-1.7	V	3.0	44.7	1.0	-45.3	-13.0	-32.3	
3800.00	-7.8	H	3.0	44.4	1.0	-51.2	-13.0	-38.2	
5700.00	-5.2	H	3.0	44.7	1.0	-48.9	-13.0	-35.9	
7600.00	-1.8	H	3.0	44.7	1.0	-45.5	-13.0	-32.5	

20 MHz
QPSK
ANT C

UL Verification Services, Inc.
Above 1GHz High Frequency Substitution Measurement

Company: Samsung
Project #: 4791754791
Date: 2025-05-21
Test Engineer: 24542
Configuration: EUT / AC Adapter, Y-Position
Location: Chamber 1
Mode: LTE_QPSK Band 2 Harmonics, 20MHz Bandwidth
Test Votage: AC 120 V, 60 Hz

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 1860MHz									
3720.00	-8.4	V	3.0	44.3	1.0	-51.7	-13.0	-38.7	
5580.00	-5.0	V	3.0	44.6	1.0	-48.7	-13.0	-35.7	
7440.00	-2.5	V	3.0	44.8	1.0	-46.3	-13.0	-33.3	
3720.00	-8.5	H	3.0	44.3	1.0	-51.8	-13.0	-38.8	
5580.00	-3.9	H	3.0	44.6	1.0	-47.6	-13.0	-34.6	
7440.00	-2.4	H	3.0	44.8	1.0	-46.2	-13.0	-33.2	
Mid Ch, 1880MHz									
3760.00	-8.3	V	3.0	44.3	1.0	-51.6	-13.0	-38.6	
5640.00	-1.9	V	3.0	44.7	1.0	-45.6	-13.0	-32.6	
7520.00	-2.6	V	3.0	44.7	1.0	-46.3	-13.0	-33.3	
3760.00	-8.3	H	3.0	44.3	1.0	-51.6	-13.0	-38.6	
5640.00	-4.0	H	3.0	44.7	1.0	-47.6	-13.0	-34.6	
7520.00	-2.7	H	3.0	44.7	1.0	-46.4	-13.0	-33.4	
High Ch, 1900MHz									
3800.00	-8.3	V	3.0	44.4	1.0	-51.7	-13.0	-38.7	
5700.00	-5.1	V	3.0	44.7	1.0	-48.8	-13.0	-35.8	
7600.00	-2.1	V	3.0	44.7	1.0	-45.8	-13.0	-32.8	
3800.00	-8.0	H	3.0	44.4	1.0	-51.4	-13.0	-38.4	
5700.00	-5.2	H	3.0	44.7	1.0	-48.8	-13.0	-35.8	
7600.00	-2.0	H	3.0	44.7	1.0	-45.7	-13.0	-32.7	

END OF REPORT

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