



TESTREPORT

Applicant Name : Inrico Technologies Co.,Ltd
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No. 20 Gaoxin South 7th Road, Shenzhen, China
Report Number : SZNS220908-40790E-RF-00D
FCC ID: 2AIV6-2-T522A

Test Standard (s)

FCC PART 27; FCC PART 22H; FCC PART 24E

Sample Description

Product Type: PoC RADIO
Model No.: T522A
Multiple Model(s) No.: N/A
Trade Mark: Inrico
Date Received: 2022/09/08
Report Date: 2023/01/11

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Approved By:

Roger Ling

Candy Li

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Note: This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk "★".

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FCC -2G,3G,4G

REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	SZNS220908-40790E-RF-00D	Original Report	2023/01/11

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Frequency Range	GSM 850: 824-849MHz(TX); 869-894MHz(RX) PCS 1900: 1850-1910MHz(TX); 1930-1990MHz(RX) WCDMA Band 2: 1850-1910MHz(TX); 1930-1990MHz(RX) WCDMA Band 5: 824-849MHz(TX); 869-894MHz(RX) LTE Band 2: 1850-1910MHz(TX); 1930-1990MHz(RX) LTE Band 4: 1710-1755MHz(TX); 2110-2155MHz(RX) LTE Band 5: 824-849MHz(TX); 869-894MHz(RX) LTE Band 7: 2500-2570MHz(TX); 2620-2690MHz(RX) LTE Band 12: 699-716MHz(TX); 729-746MHz(RX) LTE Band 13: 777-787MHz(TX); 746-756MHz(RX) LTE Band 66: 1710-1780MHz(TX); 2110-2180MHz(RX)
Modulation Technique	2G: GMSK, 8PSK 3G: BPSK, QPSK, 16QAM 4G: QPSK, 16QAM
Antenna Specification*	GSM850/WCDMA Band5/LTE Band 5:1.1dBi PCS1900/WCDMA Band 2/ LTE Band 2: 1.7dBi LTE Band 4: 1.7dBi LTE Band 7: 1.8dBi; LTE Band 12/13:0.8dBi LTE Band 66: 1.7dBi (provided by the applicant)
Voltage Range	HS: DC 3.7V from battery or DC 4.2V from charger Charger: DC5V from adapter
Sample serial number	SZNS220908-40790E-RF-S1 for Conducted and Radiation Emissions SZNS220908-40790E-RF-S2 for RF Conducted Test (Assigned by ATC)
Sample/EUT Status	Good condition
Adapter information	Model: HJ-0502000W2-US Input: AC 100-240V, 50/60Hz, 0.3A Output: DC 5.0V, 2000mA
Extreme condition*	L.V.: Low Voltage 3.5V _{DC} N.V.: Normal Voltage 3.7V _{DC} H.V.: High Voltage 4.2V _{DC} (provided by the applicant)

Objective

This test report is in accordance with Part 2-Subpart J, Part 22-Subpart H, Part24-Subpart E, and Part 27 of the Federal Communication Commission's rules.

The objective is to determine the compliance of the EUT with FCC rules for output power, modulation characteristic, occupied bandwidth, and spurious emission at antenna terminal, spurious radiated emission, frequency stability and band edge.

Test Methodology

All tests and measurements indicated in this document were performed in accordance with the Code of Federal Regulations Title 47 Part 2-Subpart J as well as the following parts:

Part 22 Subpart H - Public Mobile Services
 Part 24 Subpart E - Personal Communication Services
 Part 27 - Miscellaneous Wireless Communications Services

ANSI C63.26-2015: American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

All emissions measurement was performed at Shenzhen Accurate Technology Co., Ltd. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		±5%
RF output power, conducted		±0.73dB
Unwanted Emission, conducted		±1.6dB
RF Frequency		±0.082*10 ⁻⁷
Emissions, Radiated	30MHz - 1GHz	±4.28dB
	1GHz - 18GHz	±4.98dB
	18GHz - 26.5GHz	±5.06dB
Temperature		±1℃
Humidity		±6%
Supply voltages		±0.4%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The Test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 708358, the FCC Designation No.: CN1189. Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 4297.01.

Listed by Innovation, Science and Economic Development Canada (ISED), the Registration Number is 5077A.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The final qualification test was performed with the EUT operating at normal mode.

Test was performed as below table:

Frequency band	Bandwidth (MHz)	Test Frequency(MHz)		
		Low	Middle	High
GSM850	0.25	824.2	836.6	848.8
DCS1900	0.25	1850.2	1880	1909.8
WCDMA B2	4.2	1852.4	1880	1907.6
WCDMA B5	4.2	826.4	836.4	846.6
LTE B2	1.4	1850.7	1880	1909.3
	3	1851.5	1880	1908.5
	5	1852.5	1880	1907.5
	10	1855	1880	1905
	15	1857.5	1880	1902.5
	20	1860	1880	1900
LTE B4	1.4	1710.7	1732.5	1754.3
	3	1711.5	1732.5	1753.5
	5	1712.5	1732.5	1752.5
	10	1715	1732.5	1750
	15	1717.5	1732.5	1747.5
	20	1720	1732.5	1745
LTE B5	1.4	824.7	836.5	848.3
	3	825.5	836.5	847.5
	5	826.5	836.5	846.5
	10	829	836.5	844
LTE B7	5	2502.5	2535	2567.5
	10	2505	2535	2565
	15	2507.5	2535	2562.5
	20	2510	2535	2560

Frequency band	Bandwidth (MHz)	Test Frequency(MHz)		
		Low	Middle	High
LTE B12	1.4	699.7	707.5	715.3
	3	700.5	707.5	714.5
	5	701.5	707.5	713.5
	10	704	707.5	711
LTE B13	5	779.5	782	784.5
	10	/	782	/
LTE B66	1.4	1710.7	1745	1779.3
	3	1711.5	1745	1778.5
	5	1712.5	1745	1777.5
	10	1715	1745	1775
	15	1717.5	1745	1772.5
	20	1720	1745	1770

Equipment Modifications

No modification was made to the EUT.

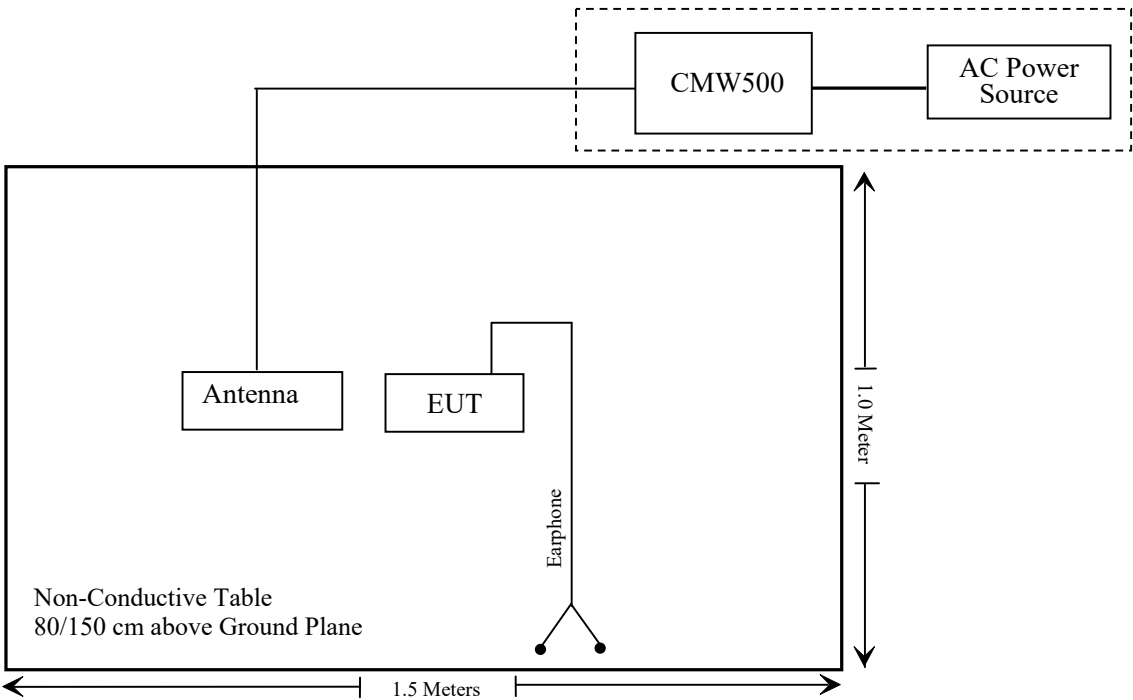
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Rohde & Schwarz	Wideband Radio Communication tester	CMW500	154606
Unknown	Earphone	Unknown	Unknown

Support Cable Description

Cable Description	Length (m)	From / Port	To
Un-shielded Un-detachable AC cable	1.2	AC Power	CMW500

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§ 1.1307 ,§2.1093	RF Exposure (SAR)	Compliant*
§2.1046; § 22.913 (a) (d); § 24.232 (c) (d); §27.50(b) (c) (d) (h);	RF Output Power	Compliant
§ 2.1047	Modulation Characteristics	Not Applicable
§ 2.1049; § 22.905; § 22.917; § 24.238; §27.53	Occupied Bandwidth	Compliant
§ 2.1051; §22.917 (a); § 24.238 (a); §27.53;	Spurious Emissions at Antenna Terminal	Compliant
§ 2.1053; § 22.917 (a); § 24.238 (a); §27.53	Field Strength of Spurious Radiation	Compliant
§ 22.917 (a); § 24.238 (a); §27.53 (c) (g) (h) (m)	Band Edge	Compliant
§ 2.1055; § 22.355; § 24.235; §27.54;	Frequency stability	Compliant

Note: * Please refer to SAR report number: CR22090016-20.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test					
Rohde& Schwarz	Test Receiver	ESR	102725	2021/12/13	2022/12/12
Rohde&Schwarz	Spectrum Analyzer	FSV40	101949	2021/12/13	2022/12/12
SONOMA INSTRUMENT	Amplifier	310 N	186131	2021/11/09	2022/11/08
A.H. Systems, inc.	Preamplifier	PAM-0118P	135	2021/11/09	2022/11/08
Quinstar	Amplifier	QLW-184055 36-J0	15964001002	2021/11/11	2022/11/10
Radiated Emission Test Software: e3 19821b (V9)					
Unknown	RF Coaxial Cable	No.10	N050	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.11	N1000	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.12	N040	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.13	N300	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.14	N800	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.15	N600	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.16	N650	2021/12/14	2022/12/13
Schwarzbeck	Bilog Antenna	VULB9163	9163-194	2020/01/05	2023/01/04
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2021/07/06	2024/07/05
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-655	2020/01/05	2023/01/04
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-1067	2020/01/05	2023/01/04
PASTERNAK	Horn Antenn	PE9852/2F-20	1120 (ATC-BA-024-1)	2020/01/05	2023/01/04
PASTERNAK	Horn Antenn	PE9852/2F-20	1120 (ATC-BA-025-1)	2020/01/05	2023/01/04
Wainwright	High Pass Filter	WHKX3.6/18 G-10SS	5	2021/12/14	2022/12/13
CD	High Pass Filter	HPM-1.2/18G -60	110	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.16	N200	2021/12/14	2022/12/13
Agilent	Signal Generator	N5183A	MY51040755	2021/12/13	2022/12/12

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
SPECTRUM ANALYZER	Rohde & Schwarz	FSU26	200982	2022/07/06	2023/07/05
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	154606	2021/12/13	2022/12/12
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	154606	2022/11/25	2023/11/24
Mini-Circuits	Power Splitter	DC-18000MHz	SF10944151S	2021/12/14	2022/12/13
Mini-Circuits	Power Splitter	DC-18000MHz	SF10944151S	2022/11/25	2023/11/24
REALE	Temp. & Humid. Chamber	RHP-800BT	R20170318310	2021/12/14	2022/12/13
Fluke	Multi Meter	45	7664009	2021/12/14	2022/12/13
Manson	DC Power Source	KPS-6604	ATCS-205	NCR	NCR
Unknown	RF Coaxial Cable	No.33	RF-03	Each time	

* Statement of Traceability: Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §1.1307(b)&§2.1093 - RF EXPOSURE INFORMATION

Applicable Standard

FCC§1.1310 and §2.1093.

Test Result

Compliant, please refer to the SAR report: CR22090016-20.

FCC§2.1047 - MODULATION CHARACTERISTIC

According to FCC § 2.1047(d), Part 22H & 24E& 27, there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

FCC § 2.1046,§ 22.913 (a) (d)&§ 24.232(c) (d); §27.50(b) (c)(d)(h)- RF OUTPUT POWER

Applicable Standard

According to FCC §2.1046 and §22.913 (a), the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

According to FCC §2.1046 and §24.232 (c),mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB.

According to §27.50(b), Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.

According to §27.50(c), Control and mobile stations in the 698-746 MHz band are limited to 30 watts ERP. And Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

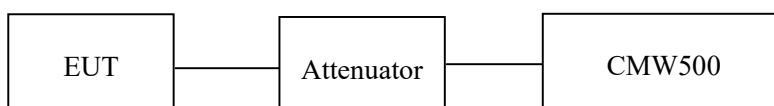
According to §27.50(d), Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

According to §27.50(h), the maximum EIRP must not exceed 2Watts (33dBm) for 2496-2690MHz.

Test Procedure

Conducted method:

The RF output of the transmitter was connected to the CMW500 through sufficient attenuation.



Note: the path loss (cable loss and attenuator) has including in the test result.

Test Data

Environmental Conditions

Temperature:	25.7℃
Relative Humidity:	58.2%
ATM Pressure:	101.0 kPa

The testing was performed by Cat Kang from 2022-09-18 to 2022-10-21.

Cellular Band (Part 22H)

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)				ERP(dBm)				Limit (dBm)
			1 slot	2 slots	3 slots	4 slots	1 slot	2 slots	3 slots	4 slots	
GPRS	128	824.2	32.25	31.13	29.39	28.28	30.80	29.68	27.94	26.83	38.45
	190	836.6	32.08	31.25	29.51	28.42	30.63	29.80	28.06	26.97	38.45
	251	848.8	32.22	31.38	29.62	28.58	30.77	29.93	28.17	27.13	38.45

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)				ERP(dBm)				Limit (dBm)
			1 slot	2 slots	3 slots	4 slots	1 slot	2 slots	3 slots	4 slots	
EDGE	128	824.2	26.28	25.02	22.92	21.71	24.83	23.57	21.47	20.26	38.45
	190	836.6	26.40	25.16	23.05	21.83	24.95	23.71	21.60	20.38	38.45
	251	848.8	26.46	25.23	23.08	21.89	25.01	23.78	21.63	20.44	38.45

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 5)	RMC12.2k		22.28	22.24	22.17	20.83	20.79	20.72
	HSDPA	1	21.24	21.22	21.10	19.79	19.77	19.65
		2	21.12	21.17	21.18	19.67	19.72	19.73
		3	21.13	21.15	21.13	19.68	19.70	19.68
		4	21.14	21.15	21.18	19.69	19.70	19.73
	HSUPA	1	20.83	20.86	20.79	19.38	19.41	19.34
		2	20.77	20.77	20.68	19.32	19.32	19.23
		3	20.62	20.72	20.47	19.17	19.27	19.02
		4	20.34	20.76	20.48	18.89	19.31	19.03
		5	20.52	20.58	20.42	19.07	19.13	18.97
	HSPA+	1	20.61	20.64	20.43	19.16	19.19	18.98

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd) - L_C (dB)

For GSM850 / WCDMA Band5: Antenna Gain = 1.1 dBi = -1.05dBd (0dBd=2.15dBi)

L_C = signal attenuation in the connecting cable between the transmitter and antenna in 0.4dB

Limit: ERP ≤ 38.45dBm

PCS Band (Part 24E)

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)				EIRP(dBm)				Limit (dBm)
			1 slot	2 slots	3 slots	4 slots	1 slot	2 slots	3 slots	4 slots	
GPRS	512	1850.2	29.54	28.82	27.04	25.98	30.64	29.92	28.14	27.08	33
	661	1880.0	29.60	28.88	27.10	26.03	30.70	29.98	28.20	27.13	33
	810	1909.8	29.55	28.97	27.18	26.15	30.65	30.07	28.28	27.25	33

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)				EIRP(dBm)				Limit (dBm)
			1 slot	2 slots	3 slots	4 slots	1 slot	2 slots	3 slots	4 slots	
EDGE	512	1850.2	26.11	24.92	22.70	21.38	27.21	26.02	23.80	22.48	33
	661	1880.0	26.22	25.02	22.85	21.56	27.32	26.12	23.95	22.66	33
	810	1909.8	26.41	25.09	22.82	21.65	27.51	26.19	23.92	22.75	33

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 2)	RMC12.2k		22.74	22.65	22.77	23.84	23.75	23.87
	HSDPA	1	21.67	21.59	21.67	22.77	22.69	22.77
		2	21.58	21.53	21.53	22.68	22.63	22.63
		3	21.44	21.48	21.55	22.54	22.58	22.65
		4	21.42	21.33	21.33	22.52	22.43	22.43
	HSUPA	1	21.29	21.22	21.26	22.39	22.32	22.36
		2	21.25	21.15	21.22	22.35	22.25	22.32
		3	21.33	21.17	21.25	22.43	22.27	22.35
		4	21.25	21.18	21.18	22.35	22.28	22.28
		5	21.21	21.25	21.19	22.31	22.35	22.29
	HSPA+	1	21.19	21.33	21.17	22.29	22.43	22.27

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi) - L_C (dB)

For PCS1900 / WCDMA Band2: Antenna Gain = 1.7 dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in 0.6dB

Limit: EIRP ≤ 33dBm

LTE Band 2

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	20.86	20.83	21.19	21.96	21.93	22.29
		RB1#3	20.98	20.97	21.32	22.08	22.07	22.42
		RB1#5	20.81	20.81	21.19	21.91	21.91	22.29
		RB3#0	20.87	20.88	21.17	21.97	21.98	22.27
		RB3#3	20.86	20.87	21.17	21.96	21.97	22.27
		RB6#0	19.89	19.90	20.26	20.99	21.00	21.36
	16QAM	RB1#0	19.96	19.81	20.12	21.06	20.91	21.22
		RB1#3	20.06	19.96	20.20	21.16	21.06	21.30
		RB1#5	19.93	19.85	20.10	21.03	20.95	21.20
		RB3#0	19.89	19.94	20.32	20.99	21.04	21.42
		RB3#3	19.88	19.91	20.31	20.98	21.01	21.41
		RB6#0	18.91	18.79	19.15	20.01	19.89	20.25
3.0	QPSK	RB1#0	21.69	21.10	21.48	22.79	22.20	22.58
		RB1#8	21.59	21.07	21.50	22.69	22.17	22.60
		RB1#14	21.62	21.04	21.48	22.72	22.14	22.58
		RB6#0	20.60	20.10	20.49	21.70	21.20	21.59
		RB6#9	20.58	20.06	20.42	21.68	21.16	21.52
		RB15#0	20.63	20.10	20.46	21.73	21.20	21.56
	16QAM	RB1#0	20.62	20.61	20.52	21.72	21.71	21.62
		RB1#8	20.59	20.59	20.52	21.69	21.69	21.62
		RB1#14	20.59	20.57	20.48	21.69	21.67	21.58
		RB6#0	19.54	19.12	19.42	20.64	20.22	20.52
		RB6#9	19.51	19.11	19.40	20.61	20.21	20.50
		RB15#0	19.64	19.16	19.38	20.74	20.26	20.48

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	21.54	21.03	21.21	22.64	22.13	22.31
		RB1#13	21.64	21.11	21.31	22.74	22.21	22.41
		RB1#24	21.48	20.97	21.14	22.58	22.07	22.24
		RB15#0	20.64	20.13	20.29	21.74	21.23	21.39
		RB15#10	20.64	20.10	20.26	21.74	21.20	21.36
		RB25#0	20.60	20.08	20.23	21.70	21.18	21.33
	16QAM	RB1#0	20.57	19.92	20.40	21.67	21.02	21.50
		RB1#13	20.65	20.00	20.51	21.75	21.10	21.61
		RB1#24	20.55	19.87	20.35	21.65	20.97	21.45
		RB15#0	19.64	19.16	19.25	20.74	20.26	20.35
		RB15#10	19.63	19.13	19.18	20.73	20.23	20.28
		RB25#0	19.62	19.13	19.21	20.72	20.23	20.31
10.0	QPSK	RB1#0	21.66	20.59	21.52	22.76	21.69	22.62
		RB1#25	21.77	20.72	21.66	22.87	21.82	22.76
		RB1#49	21.60	20.51	21.49	22.70	21.61	22.59
		RB25#0	20.64	19.62	20.64	21.74	20.72	21.74
		RB25#25	20.65	19.64	20.54	21.75	20.74	21.64
		RB50#0	20.66	19.63	20.62	21.76	20.73	21.72
	16QAM	RB1#0	20.60	20.08	20.97	21.70	21.18	22.07
		RB1#25	20.65	20.29	21.05	21.75	21.39	22.15
		RB1#49	20.54	20.03	20.85	21.64	21.13	21.95
		RB25#0	19.68	18.66	19.68	20.78	19.76	20.78
		RB25#25	19.74	18.71	19.56	20.84	19.81	20.66
		RB50#0	20.15	19.86	20.09	21.25	20.96	21.19

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	21.60	21.48	21.41	22.70	22.58	22.51
		RB1#38	21.65	21.49	21.51	22.75	22.59	22.61
		RB1#74	21.48	21.34	21.40	22.58	22.44	22.50
		RB36#0	20.67	20.59	20.70	21.77	21.69	21.80
		RB36#39	20.65	20.51	20.62	21.75	21.61	21.72
		RB75#0	20.69	20.62	20.67	21.79	21.72	21.77
	16QAM	RB1#0	20.92	20.98	20.49	22.02	22.08	21.59
		RB1#38	21.00	21.04	20.57	22.10	22.14	21.67
		RB1#74	20.82	20.87	20.46	21.92	21.97	21.56
		RB36#0	19.63	19.59	19.63	20.73	20.69	20.73
		RB36#39	19.59	19.53	19.54	20.69	20.63	20.64
		RB75#0	19.61	19.59	19.60	20.71	20.69	20.70
20.0	QPSK	RB1#0	21.40	20.54	21.19	22.50	21.64	22.29
		RB1#50	21.72	20.85	21.63	22.82	21.95	22.73
		RB1#99	21.33	20.40	21.63	22.43	21.50	22.73
		RB50#0	20.53	19.74	20.56	21.63	20.84	21.66
		RB50#50	20.56	19.67	20.40	21.66	20.77	21.50
		RB100#0	20.56	19.72	20.47	21.66	20.82	21.57
	16QAM	RB1#0	20.67	19.70	20.38	21.77	20.80	21.48
		RB1#50	20.95	19.95	20.73	22.05	21.05	21.83
		RB1#99	20.6	19.56	20.35	21.70	20.66	21.45
		RB50#0	19.53	18.74	19.54	20.63	19.84	20.64
		RB50#50	19.54	18.69	19.41	20.64	19.79	20.51
		RB100#0	19.57	18.71	19.52	20.67	19.81	20.62

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi) - L_C (dB)

For Band2: Antenna Gain = 1.7 dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in 0.6dB

Limit: EIRP ≤ 33dBm

LTE Band 4

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	22.08	22.05	21.32	23.18	23.15	22.42
		RB1#3	22.29	22.24	21.49	23.39	23.34	22.59
		RB1#5	22.05	22.06	21.29	23.15	23.16	22.39
		RB3#0	22.15	22.10	21.39	23.25	23.20	22.49
		RB3#3	22.13	22.11	21.40	23.23	23.21	22.50
		RB6#0	21.16	21.12	20.41	22.26	22.22	21.51
	16QAM	RB1#0	21.16	21.00	20.29	22.26	22.10	21.39
		RB1#3	21.37	21.21	20.50	22.47	22.31	21.60
		RB1#5	21.18	20.98	20.29	22.28	22.08	21.39
		RB3#0	21.08	21.14	20.55	22.18	22.24	21.65
		RB3#3	21.11	21.12	20.55	22.21	22.22	21.65
		RB6#0	20.16	20.02	19.40	21.26	21.12	20.50
3.0	QPSK	RB1#0	22.19	21.94	21.84	23.29	23.04	22.94
		RB1#8	22.17	21.94	21.92	23.27	23.04	23.02
		RB1#14	22.12	21.84	21.89	23.22	22.94	22.99
		RB6#0	21.12	20.96	20.88	22.22	22.06	21.98
		RB6#9	21.13	20.94	20.88	22.23	22.04	21.98
		RB15#0	21.15	20.97	20.92	22.25	22.07	22.02
	16QAM	RB1#0	21.15	21.40	21.00	22.25	22.50	22.10
		RB1#8	21.11	21.38	21.02	22.21	22.48	22.12
		RB1#14	21.09	21.36	21.01	22.19	22.46	22.11
		RB6#0	20.04	19.99	19.92	21.14	21.09	21.02
		RB6#9	19.98	19.93	19.89	21.08	21.03	20.99
		RB15#0	20.12	20.00	19.86	21.22	21.10	20.96

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	22.08	21.47	21.25	23.18	22.57	22.35
		RB1#13	22.19	21.57	21.36	23.29	22.67	22.46
		RB1#24	22.03	21.40	21.19	23.13	22.50	22.29
		RB15#0	21.13	20.55	20.33	22.23	21.65	21.43
		RB15#10	21.15	20.54	20.33	22.25	21.64	21.43
		RB25#0	21.15	20.51	20.32	22.25	21.61	21.42
	16QAM	RB1#0	21.10	20.35	20.49	22.20	21.45	21.59
		RB1#13	21.24	20.41	20.59	22.34	21.51	21.69
		RB1#24	21.05	20.28	20.49	22.15	21.38	21.59
		RB15#0	20.16	19.56	19.31	21.26	20.66	20.41
		RB15#10	20.15	19.57	19.30	21.25	20.67	20.40
		RB25#0	20.13	19.55	19.32	21.23	20.65	20.42
10.0	QPSK	RB1#0	22.16	22.09	22.13	23.26	23.19	23.23
		RB1#25	22.32	22.24	22.18	23.42	23.34	23.28
		RB1#49	22.09	22.00	22.04	23.19	23.10	23.14
		RB25#0	21.16	21.09	21.10	22.26	22.19	22.20
		RB25#25	21.22	21.06	21.06	22.32	22.16	22.16
		RB50#0	21.17	21.05	21.09	22.27	22.15	22.19
	16QAM	RB1#0	21.64	21.17	21.03	22.74	22.27	22.13
		RB1#25	21.75	21.23	21.13	22.85	22.33	22.23
		RB1#49	21.57	21.10	20.99	22.67	22.20	22.09
		RB25#0	20.18	20.06	20.19	21.28	21.16	21.29
		RB25#25	20.23	20.08	20.15	21.33	21.18	21.25
		RB50#0	20.13	20.05	20.07	21.23	21.15	21.17

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	22.08	21.48	21.71	23.18	22.58	22.81
		RB1#38	22.14	21.53	21.54	23.24	22.63	22.64
		RB1#74	21.99	21.33	21.33	23.09	22.43	22.43
		RB36#0	21.20	20.61	20.63	22.30	21.71	21.73
		RB36#39	21.12	20.54	20.56	22.22	21.64	21.66
		RB75#0	21.20	20.57	20.55	22.30	21.67	21.65
	16QAM	RB1#0	21.56	20.57	20.68	22.66	21.67	21.78
		RB1#38	21.63	20.61	20.79	22.73	21.71	21.89
		RB1#74	20.96	20.48	20.62	22.06	21.58	21.72
		RB36#0	19.64	19.69	19.58	20.74	20.79	20.68
		RB36#39	19.65	19.69	19.54	20.75	20.79	20.64
		RB75#0	19.63	19.79	19.78	20.73	20.89	20.88
20.0	QPSK	RB1#0	21.86	21.87	21.53	22.96	22.97	22.63
		RB1#50	22.16	22.13	21.81	23.26	23.23	22.91
		RB1#99	21.75	21.42	21.26	22.85	22.52	22.36
		RB50#0	21.07	20.70	20.46	22.17	21.80	21.56
		RB50#50	21.12	20.59	20.32	22.22	21.69	21.42
		RB100#0	21.08	20.74	20.49	22.18	21.84	21.59
	16QAM	RB1#0	21.32	20.76	20.37	22.42	21.86	21.47
		RB1#50	21.76	21.13	20.80	22.86	22.23	21.90
		RB1#99	21.22	20.47	20.37	22.32	21.57	21.47
		RB50#0	20.03	19.70	19.65	21.13	20.80	20.75
		RB50#50	20.06	19.80	19.61	21.16	20.90	20.71
		RB100#0	19.99	19.93	19.58	21.09	21.03	20.68

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi) - L_C (dB)

For Band4: Antenna Gain = 1.7dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in 0.6dB

Limit: EIRP ≤ 30dBm

LTE Band 5

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	22.39	22.25	22.00	20.94	20.80	20.55
		RB1#3	22.53	22.40	22.11	21.08	20.95	20.66
		RB1#5	22.42	22.21	21.99	20.97	20.76	20.54
		RB3#0	22.28	22.27	21.96	20.83	20.82	20.51
		RB3#3	22.22	22.27	21.89	20.77	20.82	20.44
		RB6#0	21.56	21.31	21.07	20.11	19.86	19.62
	16QAM	RB1#0	21.34	21.26	20.88	19.89	19.81	19.43
		RB1#3	21.54	21.42	21.13	20.09	19.97	19.68
		RB1#5	21.35	21.23	21.08	19.90	19.78	19.63
		RB3#0	21.19	21.36	21.02	19.74	19.91	19.57
		RB3#3	21.20	21.35	21.01	19.75	19.90	19.56
		RB6#0	20.41	20.21	19.97	18.96	18.76	18.52
3	QPSK	RB1#0	22.62	22.74	22.13	21.17	21.29	20.68
		RB1#8	22.63	22.69	22.07	21.18	21.24	20.62
		RB1#14	22.53	22.64	22.00	21.08	21.19	20.55
		RB6#0	21.69	21.74	21.13	20.24	20.29	19.68
		RB6#9	21.62	21.73	21.09	20.17	20.28	19.64
		RB15#0	21.52	21.76	21.03	20.07	20.31	19.58
	16QAM	RB1#0	21.87	21.89	20.98	20.42	20.44	19.53
		RB1#8	21.90	21.81	20.98	20.45	20.36	19.53
		RB1#14	21.81	21.80	20.92	20.36	20.35	19.47
		RB6#0	20.56	20.73	19.92	19.11	19.28	18.47
		RB6#9	20.51	20.72	19.90	19.06	19.27	18.45
		RB15#0	20.45	20.72	20.02	19.00	19.27	18.57

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	RB1#0	22.48	22.79	22.02	21.03	21.34	20.57
		RB1#13	22.59	22.83	22.03	21.14	21.38	20.58
		RB1#24	22.36	22.63	21.80	20.91	21.18	20.35
		RB15#0	21.52	21.87	21.07	20.07	20.42	19.62
		RB15#10	21.49	21.86	20.92	20.04	20.41	19.47
		RB25#0	21.45	21.83	20.93	20.00	20.38	19.48
	16QAM	RB1#0	21.42	21.62	21.13	19.97	20.17	19.68
		RB1#13	21.53	21.73	21.14	20.08	20.28	19.69
		RB1#24	21.34	21.55	21.01	19.89	20.10	19.56
		RB15#0	20.4	20.88	19.94	18.95	19.43	18.49
		RB15#10	20.44	20.85	19.82	18.99	19.40	18.37
		RB25#0	20.41	20.88	19.85	18.96	19.43	18.40
10	QPSK	RB1#0	22.63	22.37	21.91	21.18	20.92	20.46
		RB1#25	22.65	22.38	21.95	21.20	20.93	20.50
		RB1#49	22.32	22.11	21.69	20.87	20.66	20.24
		RB25#0	21.55	21.34	20.95	20.10	19.89	19.50
		RB25#25	21.43	21.31	20.70	19.98	19.86	19.25
		RB50#0	21.46	21.36	20.81	20.01	19.91	19.36
	16QAM	RB1#0	21.46	21.84	21.02	20.01	20.39	19.57
		RB1#25	21.51	21.90	20.99	20.06	20.45	19.54
		RB1#49	21.27	21.52	20.76	19.82	20.07	19.31
		RB25#0	20.53	20.36	19.88	19.08	18.91	18.43
		RB25#25	20.45	20.31	19.64	19.00	18.86	18.19
		RB50#0	20.44	20.32	19.76	19.00	19.27	18.57

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd) - L_C (dB)

For Band5: Antenna Gain = 1.1dBi=-1.05dBd (0dBd=2.15dBi)

L_C = signal attenuation in the connecting cable between the transmitter and antenna in 0.4dB

Limit: ERP≤38.45dBm

LTE Band 7

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	17.33	16.82	16.47	18.43	17.92	17.57
		RB1#13	16.95	16.93	16.41	18.05	18.03	17.51
		RB1#24	16.76	16.79	16.14	17.86	17.89	17.24
		RB15#0	15.70	15.86	16.21	16.80	16.96	17.31
		RB15#10	15.89	15.88	16.33	16.99	16.98	17.43
		RB25#0	15.80	15.84	16.22	16.90	16.94	17.32
	16QAM	RB1#0	16.01	15.83	16.81	17.11	16.93	17.91
		RB1#13	16.12	15.88	16.49	17.22	16.98	17.59
		RB1#24	15.98	15.82	16.04	17.08	16.92	17.14
		RB15#0	14.65	14.83	15.20	15.75	15.93	16.30
		RB15#10	14.85	14.83	15.20	15.95	15.93	16.30
		RB25#0	14.74	14.76	16.19	15.84	15.86	17.29
10.0	QPSK	RB1#0	17.51	17.91	17.32	18.61	19.01	18.42
		RB1#25	17.57	17.52	16.57	18.67	18.62	17.67
		RB1#49	17.44	17.26	15.95	18.54	18.36	17.05
		RB25#0	16.25	16.39	16.03	17.35	17.49	17.13
		RB25#25	16.61	16.44	15.99	17.71	17.54	17.09
		RB50#0	16.40	16.39	15.95	17.50	17.49	17.05
	16QAM	RB1#0	16.42	16.80	16.57	17.52	17.90	17.67
		RB1#25	16.06	16.96	17.14	17.16	18.06	18.24
		RB1#49	15.82	16.76	16.56	16.92	17.86	17.66
		RB25#0	14.80	15.38	15.35	15.90	16.48	16.45
		RB25#25	15.20	15.46	16.07	16.30	16.56	17.17
		RB50#0	14.93	15.57	16.05	16.03	16.67	17.15

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	17.40	17.35	17.59	18.50	18.45	18.69
		RB1#38	17.45	17.38	17.71	18.55	18.48	18.81
		RB1#74	17.36	17.23	17.05	18.46	18.33	18.15
		RB36#0	16.33	16.45	16.38	17.43	17.55	17.48
		RB36#39	16.58	16.46	16.72	17.68	17.56	17.82
		RB75#0	16.52	16.45	16.32	17.62	17.55	17.42
	16QAM	RB1#0	16.67	16.72	16.51	17.77	17.82	17.61
		RB1#38	16.70	16.81	16.58	17.80	17.91	17.68
		RB1#74	16.58	16.5	16.96	17.68	17.60	18.06
		RB36#0	15.27	16.68	15.33	16.37	17.78	16.43
		RB36#39	15.51	16.30	15.15	16.61	17.40	16.25
		RB75#0	15.41	15.29	15.20	16.51	16.39	16.30
20.0	QPSK	RB1#0	17.31	16.91	16.97	18.41	18.01	18.07
		RB1#50	17.52	17.25	17.34	18.62	18.35	18.44
		RB1#99	17.18	16.35	16.98	18.28	17.45	18.08
		RB50#0	16.13	15.53	16.37	17.23	16.63	17.47
		RB50#50	16.36	15.65	15.95	17.46	16.75	17.05
		RB100#0	16.27	15.59	16.19	17.37	16.69	17.29
	16QAM	RB1#0	16.72	15.56	16.15	17.82	16.66	17.25
		RB1#50	16.82	15.87	16.47	17.92	16.97	17.57
		RB1#99	16.65	15.53	16.15	17.75	16.63	17.25
		RB50#0	15.10	14.43	15.33	16.20	15.53	16.43
		RB50#50	15.30	14.62	14.87	16.40	15.72	15.97
		RB100#0	15.15	14.58	15.16	16.25	15.68	16.26

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi) - L_c (dB)

For Band7: Antenna Gain = 1.8dBi

L_c = signal attenuation in the connecting cable between the transmitter and antenna in 0.7dB

Limit: EIRP ≤ 33dBm

LTE Band 12

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	22.98	22.76	22.92	21.23	21.01	21.17
		RB1#3	23.18	23.05	23.16	21.43	21.30	21.41
		RB1#5	22.98	22.75	22.94	21.23	21.00	21.19
		RB3#0	23.00	22.75	22.90	21.25	21.00	21.15
		RB3#3	22.98	22.78	22.85	21.23	21.03	21.10
		RB6#0	22.04	21.85	22.04	20.29	20.10	20.29
	16QAM	RB1#0	22.07	21.68	21.78	20.32	19.93	20.03
		RB1#3	22.24	21.89	22.01	20.49	20.14	20.26
		RB1#5	22.07	21.73	21.79	20.32	19.98	20.04
		RB3#0	21.94	21.82	21.97	20.19	20.07	20.22
		RB3#3	21.98	21.78	21.91	20.23	20.03	20.16
		RB6#0	21.07	20.73	20.95	19.32	18.98	19.20
3	QPSK	RB1#0	23.08	23.05	22.97	21.33	21.30	21.22
		RB1#8	23.06	22.96	23.01	21.31	21.21	21.26
		RB1#14	23.04	22.93	22.98	21.29	21.18	21.23
		RB6#0	21.96	22.03	21.99	20.21	20.28	20.24
		RB6#9	21.97	21.95	21.96	20.22	20.20	20.21
		RB15#0	22.00	21.96	21.90	20.25	20.21	20.15
	16QAM	RB1#0	22.00	22.47	22.04	20.25	20.72	20.29
		RB1#8	21.96	22.44	21.97	20.21	20.69	20.22
		RB1#14	21.93	22.40	21.95	20.18	20.65	20.20
		RB6#0	20.90	21.04	20.93	19.15	19.29	19.18
		RB6#9	20.90	21.01	20.94	19.15	19.26	19.19
		RB15#0	21.03	21.01	20.80	19.28	19.26	19.05

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	RB1#0	22.94	23.23	22.48	21.19	21.48	20.73
		RB1#13	23.03	23.28	22.54	21.28	21.53	20.79
		RB1#24	22.92	23.15	22.47	21.17	21.40	20.72
		RB15#0	21.96	22.40	21.44	20.21	20.65	19.69
		RB15#10	22.04	22.17	21.49	20.29	20.42	19.74
		RB25#0	21.99	22.26	21.42	20.24	20.51	19.67
	16QAM	RB1#0	21.91	22.02	21.71	20.16	20.27	19.96
		RB1#13	22.05	22.15	21.73	20.30	20.40	19.98
		RB1#24	21.91	21.98	21.56	20.16	20.23	19.81
		RB15#0	20.97	21.37	20.40	19.22	19.62	18.65
		RB15#10	21.04	21.23	20.45	19.29	19.48	18.70
		RB25#0	20.99	21.30	20.42	19.24	19.55	18.67
10	QPSK	RB1#0	22.96	23.27	23.03	21.21	21.52	21.28
		RB1#25	23.18	23.44	23.13	21.43	21.69	21.38
		RB1#49	22.94	23.26	23.01	21.19	21.51	21.26
		RB25#0	21.93	22.34	22.09	20.18	20.59	20.34
		RB25#25	21.90	22.24	22.11	20.15	20.49	20.36
		RB50#0	21.91	22.31	22.08	20.16	20.56	20.33
	16QAM	RB1#0	22.45	22.32	21.94	20.70	20.57	20.19
		RB1#25	22.58	22.50	22.06	20.83	20.75	20.31
		RB1#49	22.43	22.31	21.84	20.68	20.56	20.09
		RB25#0	20.99	21.33	21.18	19.24	19.58	19.43
		RB25#25	20.92	21.22	21.17	19.17	19.47	19.42
		RB50#0	20.89	21.29	21.10	19.14	19.54	19.35

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd) - L_C (dB)

For Band12: Antenna Gain = 0.8dBi = -1.35dBd (0dBd=2.15dBi)

L_C = signal attenuation in the connecting cable between the transmitter and antenna in 0.4dB

Limit: ERP ≤ 34.77dBm

LTE Band 13

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	23.14	22.82	22.76	21.39	21.07	21.01
		RB1#13	23.19	22.90	22.87	21.44	21.15	21.12
		RB1#24	23.10	22.77	22.72	21.35	21.02	20.97
		RB15#0	22.08	21.82	21.96	20.33	20.07	20.21
		RB15#10	22.18	21.76	21.75	20.43	20.01	20.00
		RB25#0	22.08	21.75	21.78	20.33	20.00	20.03
	16QAM	RB1#0	22.33	21.81	21.54	20.58	20.06	19.79
		RB1#13	22.42	21.83	21.6	20.67	20.08	19.85
		RB1#24	22.25	21.73	21.55	20.50	19.98	19.80
		RB15#0	21.03	20.80	20.91	19.28	19.05	19.16
		RB15#10	21.09	20.73	20.69	19.34	18.98	18.94
		RB25#0	21.05	20.74	20.80	19.30	18.99	19.05
10.0	QPSK	RB1#0	/	22.89	/	/	21.14	/
		RB1#25	/	23.13	/	/	21.38	/
		RB1#49	/	22.83	/	/	21.08	/
		RB25#0	/	21.76	/	/	20.01	/
		RB25#25	/	21.66	/	/	19.91	/
		RB50#0	/	21.71	/	/	19.96	/
	16QAM	RB1#0	/	21.82	/	/	20.07	/
		RB1#25	/	21.94	/	/	20.19	/
		RB1#49	/	21.71	/	/	19.96	/
		RB25#0	/	20.84	/	/	19.09	/
		RB25#25	/	20.70	/	/	18.95	/
		RB50#0	/	20.73	/	/	18.98	/

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd) - L_C (dB)

For Band13: Antenna Gain = 0.8dBi = -1.35dBd (0dBd=2.15dBi)

L_C = signal attenuation in the connecting cable between the transmitter and antenna in 0.4dB

Limit: ERP ≤ 34.77dBm

LTE Band 66

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	21.97	21.66	21.54	23.07	22.76	22.64
		RB1#3	22.07	21.79	21.72	23.17	22.89	22.82
		RB1#5	21.91	21.66	21.82	23.01	22.76	22.92
		RB3#0	21.96	21.63	21.53	23.06	22.73	22.63
		RB3#3	21.97	21.67	21.50	23.07	22.77	22.60
		RB6#0	21.01	20.67	20.58	22.11	21.77	21.68
	16QAM	RB1#0	21.04	20.54	20.57	22.14	21.64	21.67
		RB1#3	21.18	20.73	19.14	22.28	21.83	20.24
		RB1#5	21.03	20.62	20.23	22.13	21.72	21.33
		RB3#0	20.93	20.78	20.55	22.03	21.88	21.65
		RB3#3	20.95	20.84	20.30	22.05	21.94	21.40
		RB6#0	20.03	19.91	19.97	21.13	21.01	21.07
3	QPSK	RB1#0	22.46	22.09	22.15	23.56	23.19	23.25
		RB1#8	22.43	22.02	22.15	23.53	23.12	23.25
		RB1#14	22.42	21.99	21.85	23.52	23.09	22.95
		RB6#0	21.38	21.02	20.83	22.48	22.12	21.93
		RB6#9	21.38	20.98	21.03	22.48	22.08	22.13
		RB15#0	21.39	20.98	20.94	22.49	22.08	22.04
	16QAM	RB1#0	21.35	21.40	21.06	22.45	22.50	22.16
		RB1#8	20.05	21.34	20.20	21.15	22.44	21.30
		RB1#14	21.36	21.36	21.01	22.46	22.46	22.11
		RB6#0	20.31	19.97	19.95	21.41	21.07	21.05
		RB6#9	20.27	19.95	19.97	21.37	21.05	21.07
		RB15#0	20.36	20.00	20.05	21.46	21.10	21.15

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	RB1#0	22.33	22.08	21.20	23.43	23.18	22.30
		RB1#13	22.42	22.15	21.34	23.52	23.25	22.44
		RB1#24	22.26	22.02	21.75	23.36	23.12	22.85
		RB15#0	21.38	21.10	21.04	22.48	22.20	22.14
		RB15#10	21.37	21.03	20.96	22.47	22.13	22.06
		RB25#0	21.36	21.04	20.91	22.46	22.14	22.01
	16QAM	RB1#0	21.15	21.24	21.08	22.25	22.34	22.18
		RB1#13	21.23	21.30	21.16	22.33	22.40	22.26
		RB1#24	21.13	21.16	21.11	22.23	22.26	22.21
		RB15#0	20.40	20.06	20.06	21.50	21.16	21.16
		RB15#10	20.37	20.01	19.96	21.47	21.11	21.06
		RB25#0	20.37	20.02	19.99	21.47	21.12	21.09
10	QPSK	RB1#0	22.45	21.50	22.11	23.55	22.60	23.21
		RB1#25	22.56	21.54	22.19	23.66	22.64	23.29
		RB1#49	22.37	21.37	21.74	23.47	22.47	22.84
		RB25#0	21.41	20.47	20.88	22.51	21.57	21.98
		RB25#25	21.42	20.38	20.74	22.52	21.48	21.84
		RB50#0	21.41	20.43	20.84	22.51	21.53	21.94
	16QAM	RB1#0	21.39	20.83	20.97	22.49	21.93	22.07
		RB1#25	21.50	20.84	21.07	22.60	21.94	22.17
		RB1#49	21.28	20.75	20.87	22.38	21.85	21.97
		RB25#0	20.45	19.48	19.95	21.55	20.58	21.05
		RB25#25	20.45	19.42	19.87	21.55	20.52	20.97
		RB50#0	20.41	19.38	20.19	21.51	20.48	21.29

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15	QPSK	RB1#0	22.32	22.22	21.69	23.42	23.32	22.79
		RB1#38	22.40	22.27	21.85	23.50	23.37	22.95
		RB1#74	22.22	22.03	21.68	23.32	23.13	22.78
		RB36#0	21.46	21.42	20.90	22.56	22.52	22.00
		RB36#39	21.45	21.29	20.82	22.55	22.39	21.92
		RB75#0	21.45	21.34	20.88	22.55	22.44	21.98
	16QAM	RB1#0	21.80	21.26	20.94	22.90	22.36	22.04
		RB1#38	21.86	21.30	20.98	22.96	22.40	22.08
		RB1#74	21.64	21.10	20.81	22.74	22.20	21.91
		RB36#0	21.05	20.34	19.81	22.15	21.44	20.91
		RB36#39	19.99	20.24	19.70	21.09	21.34	20.80
		RB75#0	19.97	20.28	19.76	21.07	21.38	20.86
20	QPSK	RB1#0	22.17	21.96	21.86	23.27	23.06	22.96
		RB1#50	22.50	22.30	22.25	23.60	23.40	23.35
		RB1#99	22.08	21.79	22.24	23.18	22.89	23.34
		RB50#0	21.32	21.16	21.03	22.42	22.26	22.13
		RB50#50	21.31	21.04	20.90	22.41	22.14	22.00
		RB100#0	21.31	21.09	21.00	22.41	22.19	22.10
	16QAM	RB1#0	21.43	21.05	21.23	22.53	22.15	22.33
		RB1#50	21.71	21.33	21.72	22.81	22.43	22.82
		RB1#99	21.29	20.91	21.16	22.39	22.01	22.26
		RB50#0	20.31	20.16	20.09	21.41	21.26	21.19
		RB50#50	20.29	19.99	19.97	21.39	21.09	21.07
		RB100#0	20.31	20.08	20.08	21.41	21.18	21.18

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi) - L_C (dB)

For Band66: Antenna Gain = 1.7dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in 0.6dB

Limit: EIRP ≤ 30dBm

Peak-to-average ratio (PAR)**Cellular Band**

Mode	Channel	PAR (dB)	Limit (dB)
GPRS	Low	3.57	13
	Middle	3.82	13
	High	3.77	13

Mode	Channel	PAR (dB)	Limit (dB)
EGPRS	Low	3.15	13
	Middle	3.28	13
	High	3.33	13

Mode	Channel	PAR (dB)	Limit (dB)
RMC (BPSK)	Low	4.65	13
	Middle	4.84	13
	High	4.75	13
HSDPA (16QAM)	Low	4.85	13
	Middle	4.45	13
	High	4.28	13
HSUPA (BPSK)	Low	4.62	13
	Middle	4.17	13
	High	4.13	13
HSPA+	Low	4.88	13
	Middle	4.65	13
	High	4.05	13

PCS Band

Mode	Channel	PAR (dB)	Limit (dB)
GPRS	Low	3.87	13
	Middle	3.72	13
	High	4.24	13

Mode	Channel	PAR (dB)	Limit (dB)
EGPRS	Low	3.26	13
	Middle	3.25	13
	High	3.44	13

Mode	Channel	PAR (dB)	Limit (dB)
RMC (BPSK)	Low	4.44	13
	Middle	4.86	13
	High	4.52	13
HSDPA (16QAM)	Low	4.33	13
	Middle	4.47	13
	High	4.52	13
HSUPA (BPSK)	Low	4.31	13
	Middle	4.25	13
	High	4.28	13
HSPA+	Low	4.62	13
	Middle	4.38	13
	High	4.52	13

LTE Band 2 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	5.71	5.71	7.22	13	Pass
QPSK (100RB Size)	5.58	5.26	6.38	13	Pass
16QAM (1RB Size)	6.77	7.33	7.15	13	Pass
16QAM (100RB Size)	6.51	6.88	6.45	13	Pass

LTE Band 4 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	5.54	6.26	6.2	13	Pass
QPSK (100RB Size)	5.24	5.68	5.65	13	Pass
16QAM (1RB Size)	6.42	6.57	7.22	13	Pass
16QAM (100RB Size)	6.53	6.28	6.55	13	Pass

LTE Band 5 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	4.22	3.39	3.75	13	Pass
QPSK (50RB Size)	4.35	4.76	4.53	13	Pass
16QAM (1RB Size)	4.29	4.21	4.71	13	Pass
16QAM (50RB Size)	4.77	6.12	5.65	13	Pass

LTE Band 7 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	5.86	5.73	6.25	13	Pass
QPSK (100RB Size)	5.44	5.52	5.63	13	Pass
16QAM (1RB Size)	6.32	7.59	7.66	13	Pass
16QAM (100RB Size)	6.42	7.11	7.35	13	Pass

LTE Band 12 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	3.85	3.52	3.67	13	Pass
QPSK (50RB Size)	3.88	3.91	3.89	13	Pass
16QAM (1RB Size)	3.54	3.67	3.62	13	Pass
16QAM (50RB Size)	4.55	4.98	4.87	13	Pass

LTE Band 13 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	/	5.26	/	13	Pass
QPSK (50RB Size)	/	5.37	/	13	Pass
16QAM (1RB Size)	/	5.16	/	13	Pass
16QAM (50RB Size)	/	6.25	/	13	Pass

LTE Band 66 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	5.75	5.74	5.82	13	Pass
QPSK (100RB Size)	5.56	5.73	5.76	13	Pass
16QAM (1RB Size)	6.92	7.57	7.54	13	Pass
16QAM (100RB Size)	6.45	6.55	6.87	13	Pass

FCC §2.1049, §22.917, §22.905 & §24.238&§27.53 - OCCUPIED BANDWIDTH

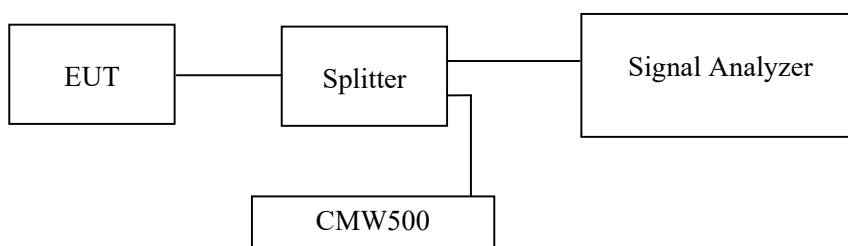
Applicable Standard

FCC 47 §2.1049, §22.917, §22.905, §24.238, and §27.53.

Test Procedure

The RF output of the transmitter was connected to the simulator and the spectrum analyzer through sufficient attenuation.

The resolution bandwidth of the spectrum analyzer was set at 1% to 5% of the anticipated emission bandwidth and the 26 dB & 99% bandwidth was recorded.



Note: the worst path loss (cable loss and splitter inset loss) among the test frequency range has added into plot.

Test Data

Environmental Conditions

Temperature:	25.7℃
Relative Humidity:	58.2%
ATM Pressure:	101.0 kPa

The testing was performed by Cat Kang from 2022-10-18 to 2022-10-20.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the following tables and plots.

Cellular Band (Part 22H)

Mode	Channel	Frequency (MHz)	99% Occupied Bandwidth (kHz)	26 dB Emission Bandwidth (kHz)
GPRS(GMSK)	128	824.2	246.00	318.00
	190	836.6	245.00	322.00
	251	848.8	248.00	319.00
EGPRS(8PSK)	128	824.2	247.00	321.00
	190	836.6	250.00	310.00
	251	848.8	248.00	316.00

	Frequency (MHz)	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
RMC	826.4	4.19	4.77
	836.4	4.17	4.74
	846.6	4.19	4.77
HSDPA	826.4	4.22	4.85
	836.4	4.23	4.82
	846.6	4.20	4.80
HSUPA	826.4	4.23	4.76
	836.4	4.19	4.73
	846.6	4.19	4.74

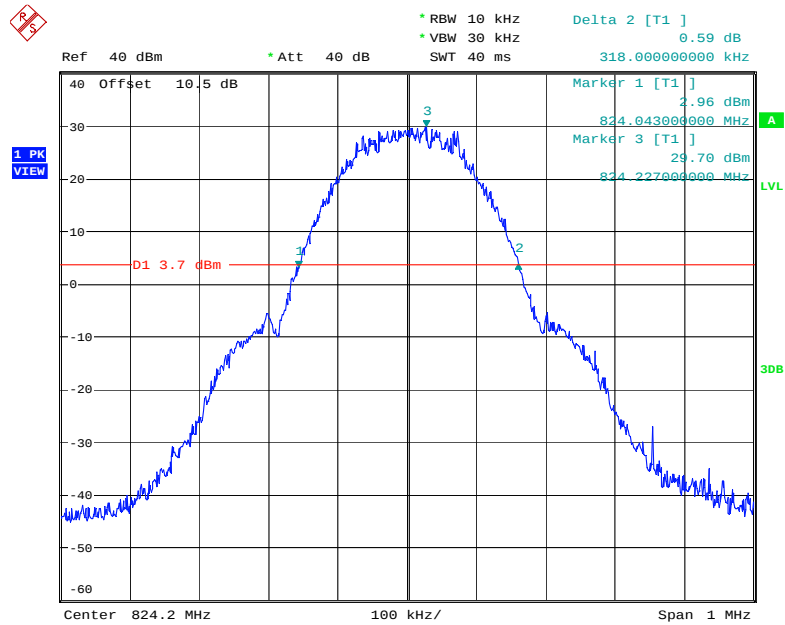
PCS Band (Part 24E)

Mode	Channel	Frequency (MHz)	99% Occupied Bandwidth (kHz)	26 dB Emission Bandwidth (kHz)
GPRS(GMSK)	512	1850.2	244.00	313.00
	661	1880.0	247.00	321.00
	810	1909.8	245.00	320.00
EGPRS(8PSK)	512	1850.2	252.00	327.00
	661	1880.0	254.00	321.00
	810	1909.8	253.00	326.00

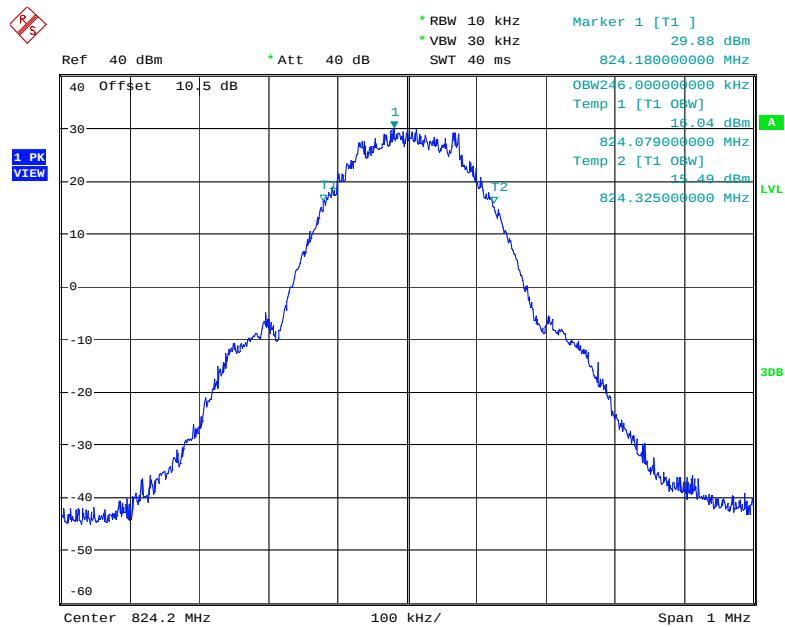
Frequency (MHz)		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
RMC	1852.4	4.17	4.74
	1880.0	4.17	4.74
	1907.6	4.19	4.76
HSDPA	1852.4	4.22	5.66
	1880.0	4.22	5.37
	1907.6	4.19	4.88
HSUPA	1852.4	4.22	4.77
	1880.0	4.20	5.06
	1907.6	4.19	4.74

Cellular Band (Part 22H)

26 dB Emissions & 99% Occupied Bandwidth for GSM (GMSK) Mode, Low channel

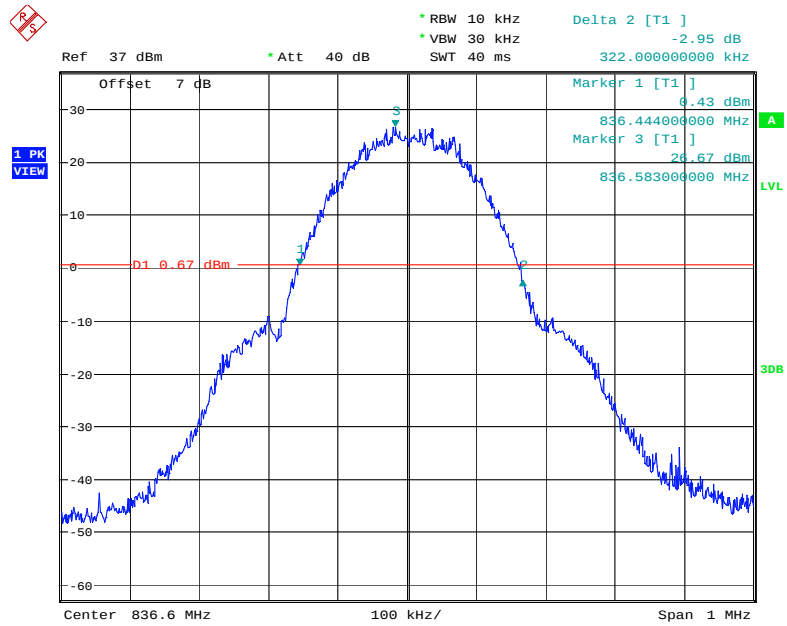


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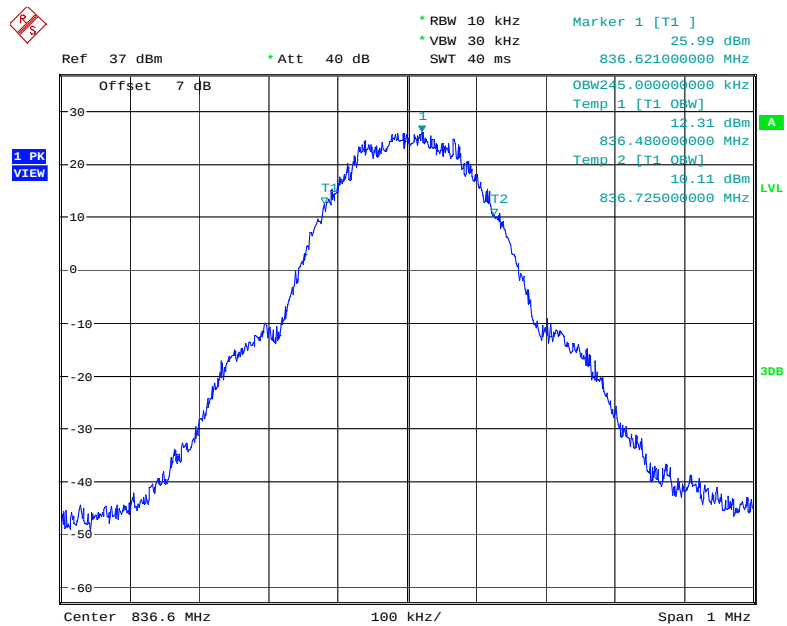


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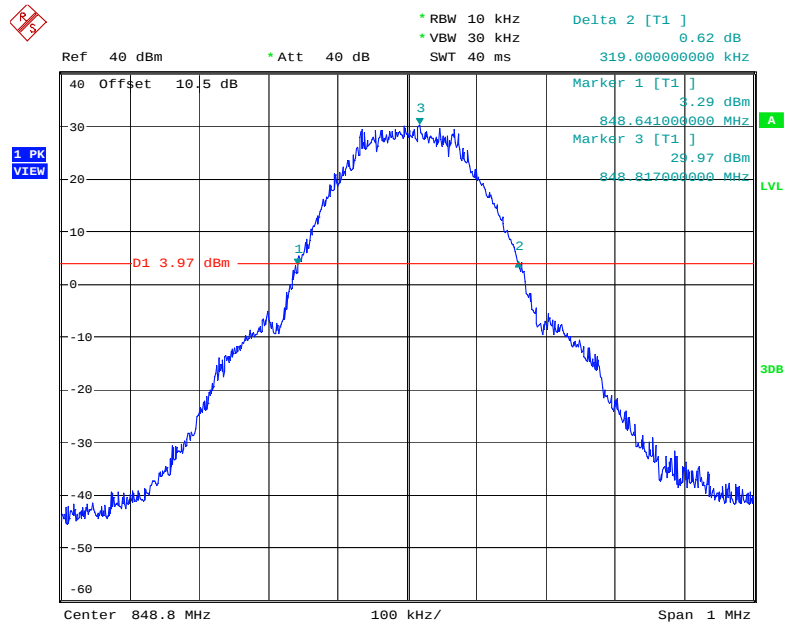
26 dB Emissions & 99% Occupied Bandwidth for GSM (GMSK) Mode, Middle channel



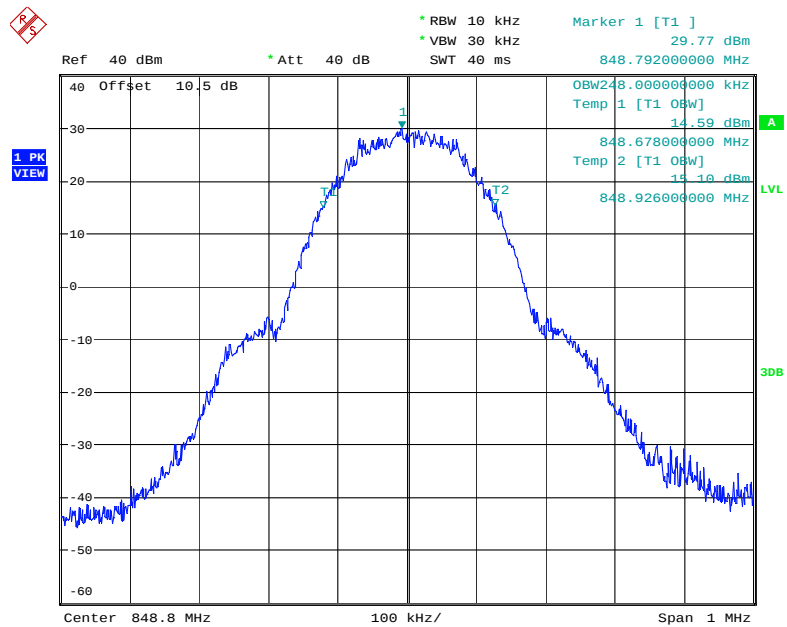
Date: 20.OCT.2022 11:06:57



Date: 20.OCT.2022 11:06:18

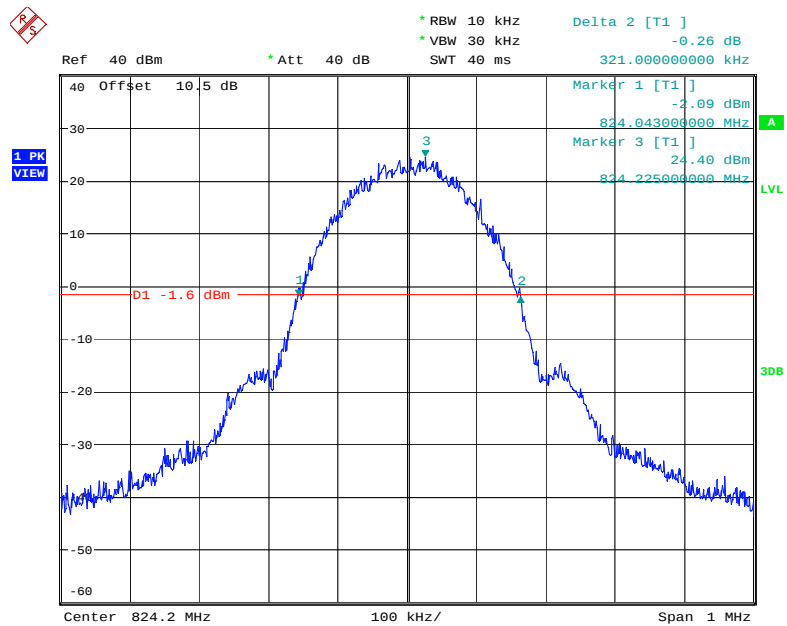
26 dB Emissions & 99% Occupied Bandwidth for GSM (GMSK) Mode, High channel

Date: 20.OCT.2022 11:09:24

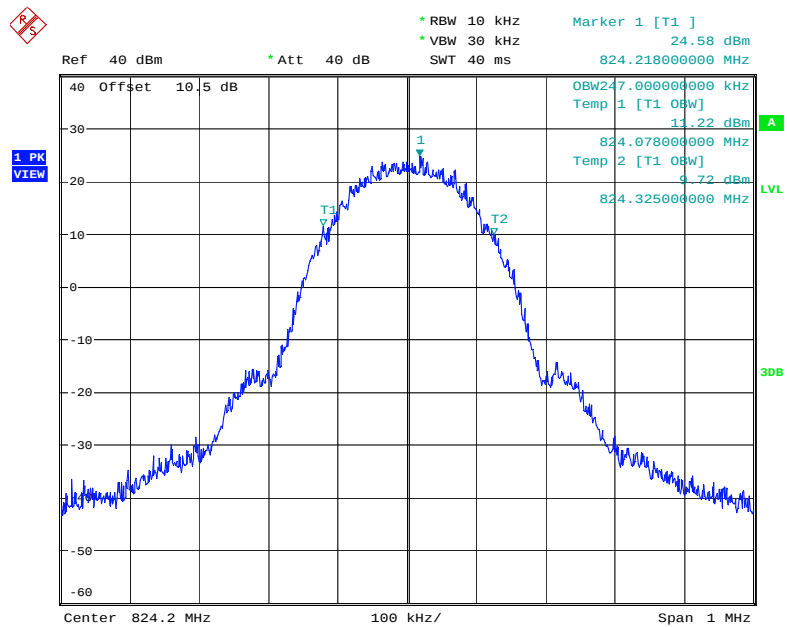


Date: 20.OCT.2022 11:08:45

26 dB Emission Bandwidth for GSM(8PSK) Mode, Low channel

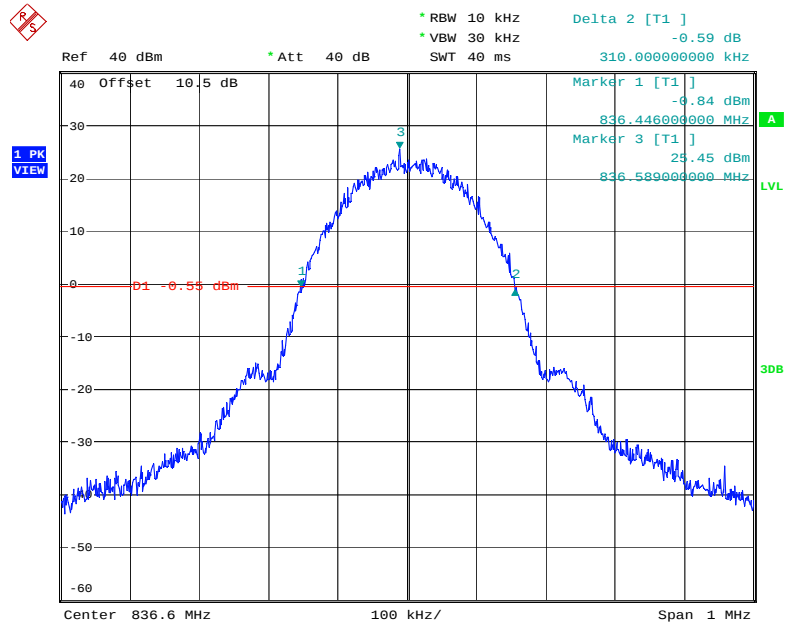


Date: 20.OCT.2022 08:52:03

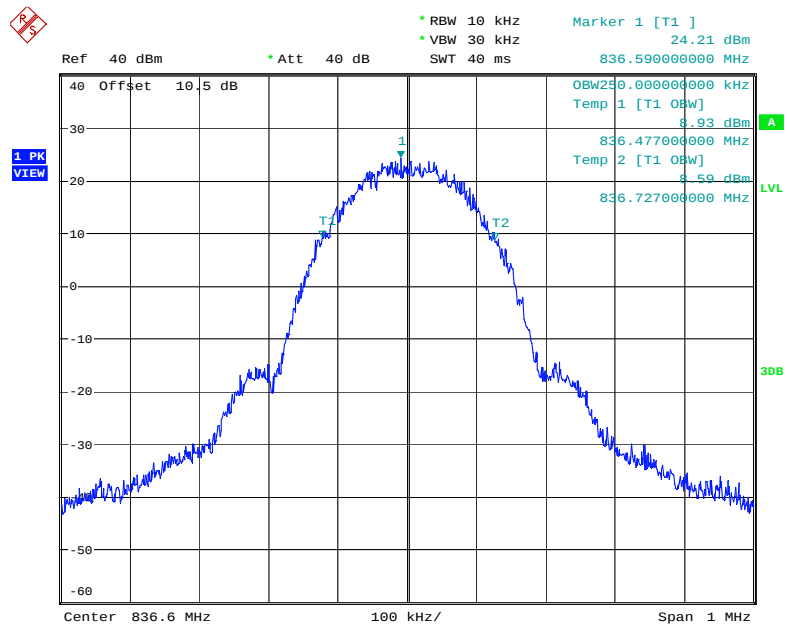


Date: 20.OCT.2022 08:51:22

26 dB Emission Bandwidth for GSM(8PSK) Mode, Middle channel

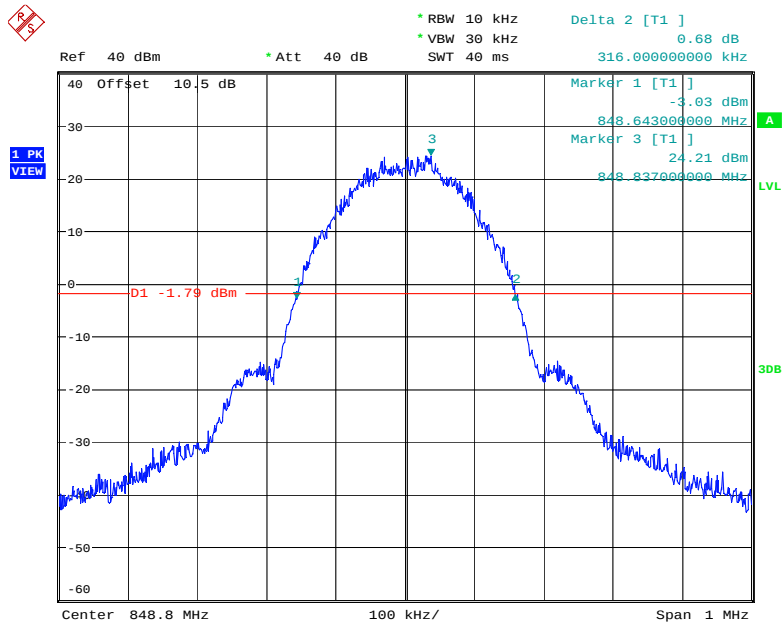


Date: 20.OCT.2022 08:56:49

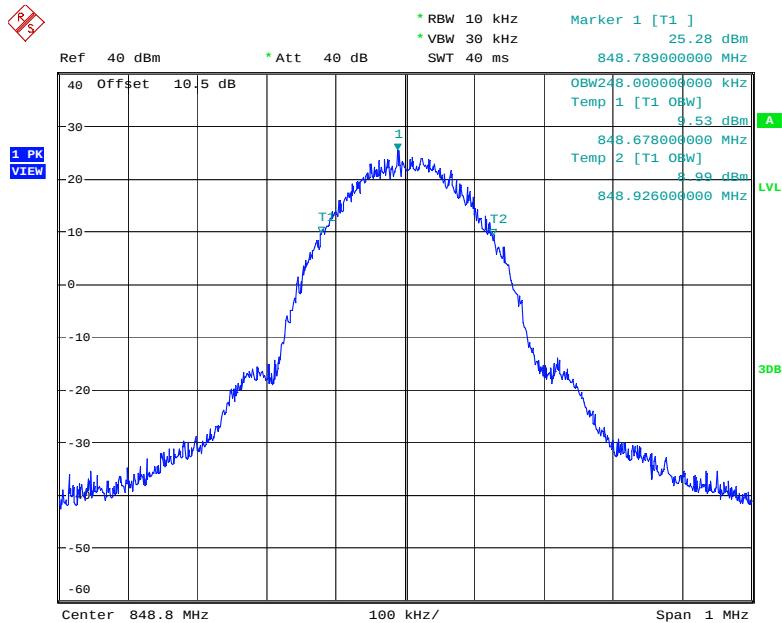


Date: 20.OCT.2022 08:56:11

26 dB Emission Bandwidth for GSM(8PSK) Mode, High channel

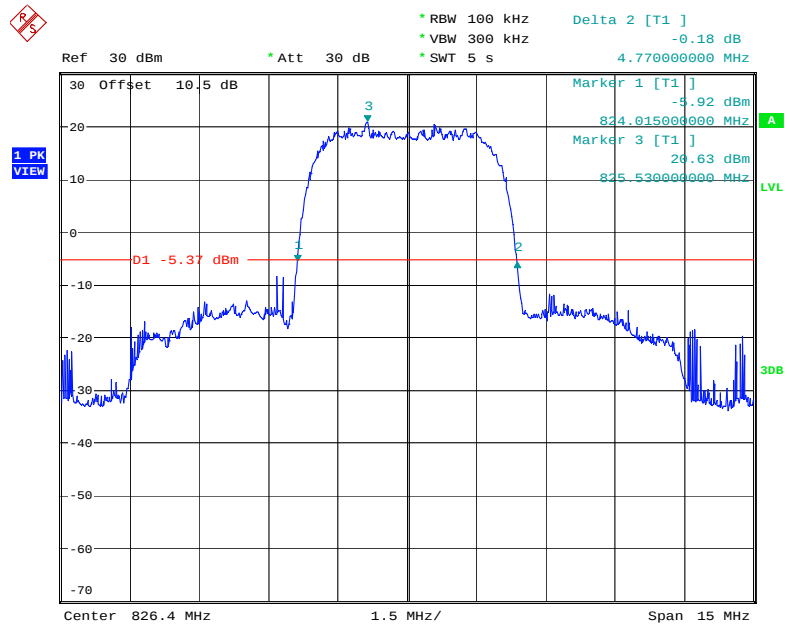


Date: 20.OCT.2022 09:00:09

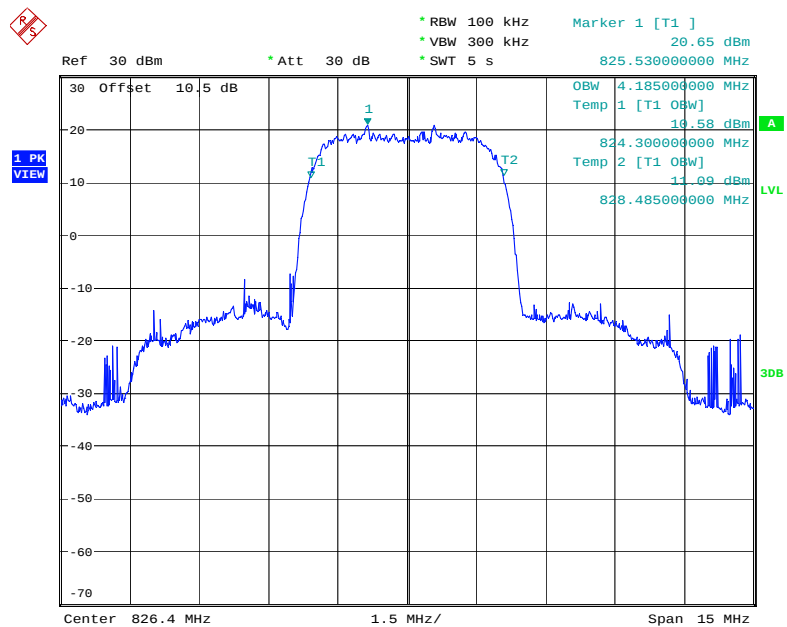


Date: 20.OCT.2022 08:59:30

26 dB Emission Bandwidth for RMC (BPSK) Mode, Low channel

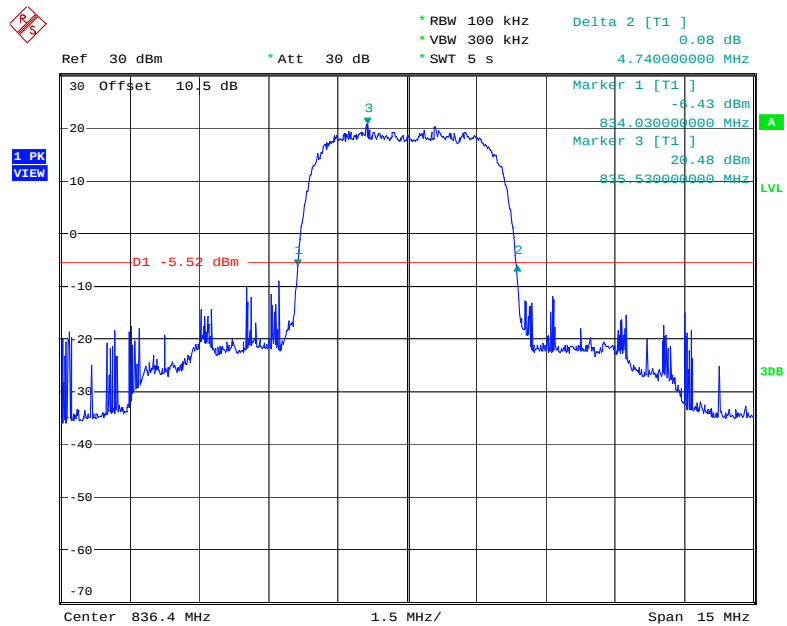


Date: 18.OCT.2022 19:03:56

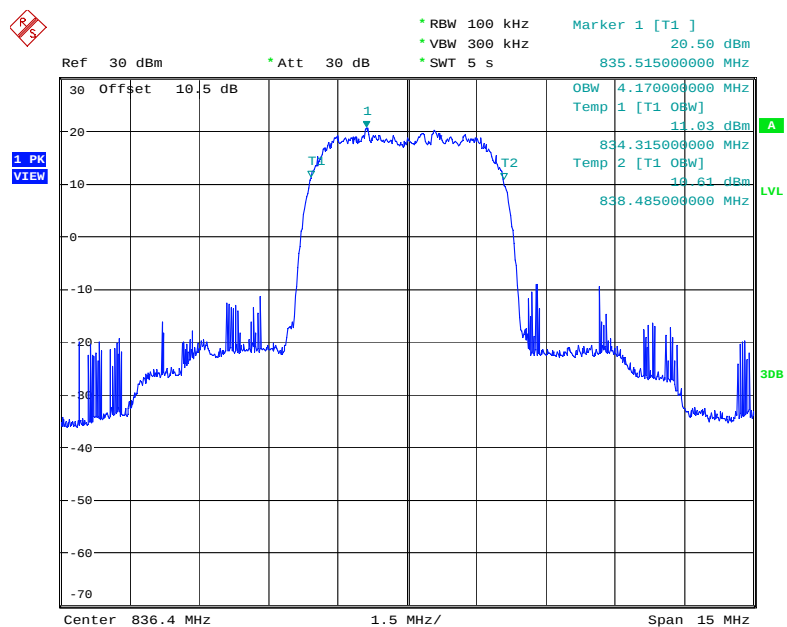


Date: 18.OCT.2022 19:03:16

26 dB Emission Bandwidth for RMC (BPSK) Mode, Middle channel

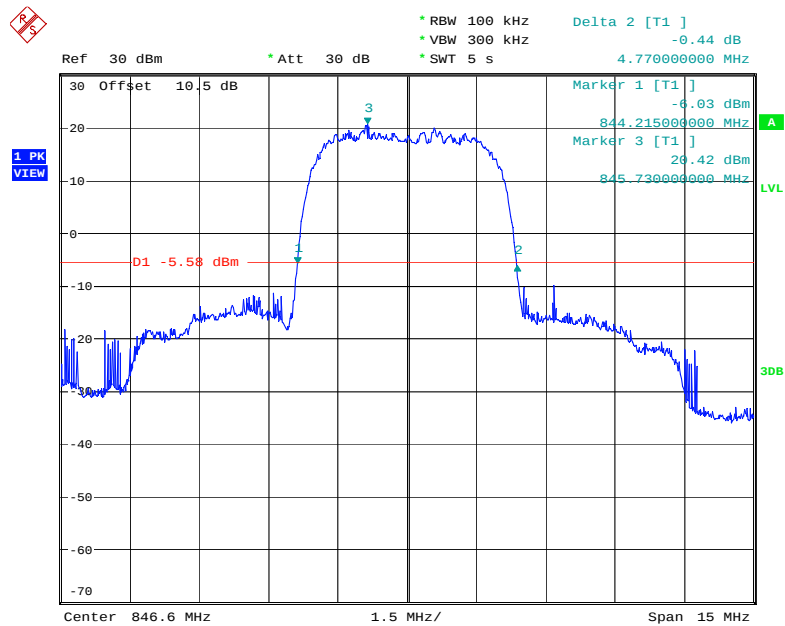


Date: 18.OCT.2022 19:08:02

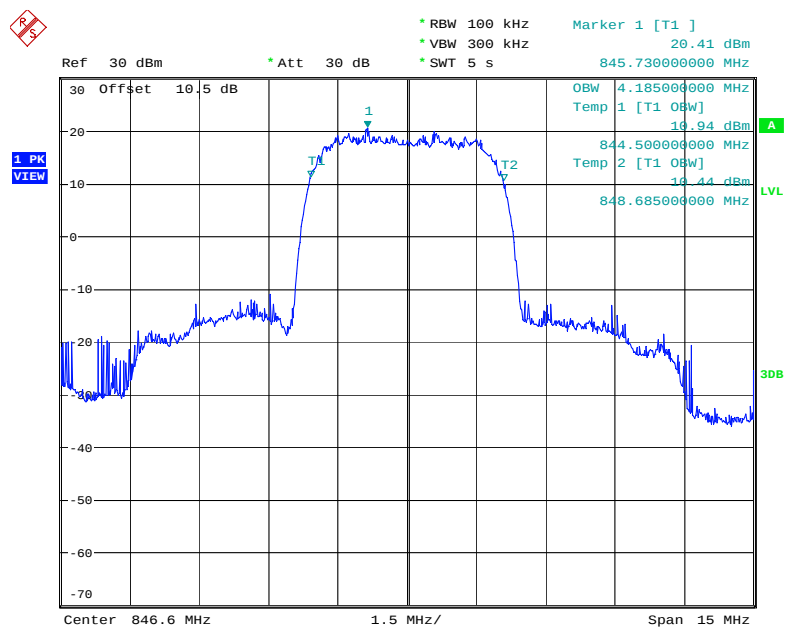


Date: 18.OCT.2022 19:07:23

26 dB Emission Bandwidth for RMC (BPSK) Mode, High channel

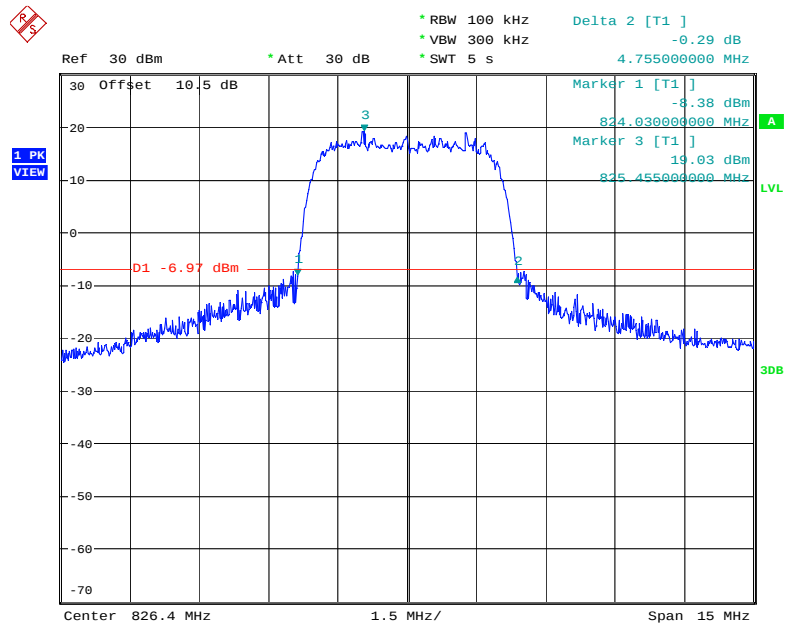


Date: 18.OCT.2022 19:10:59

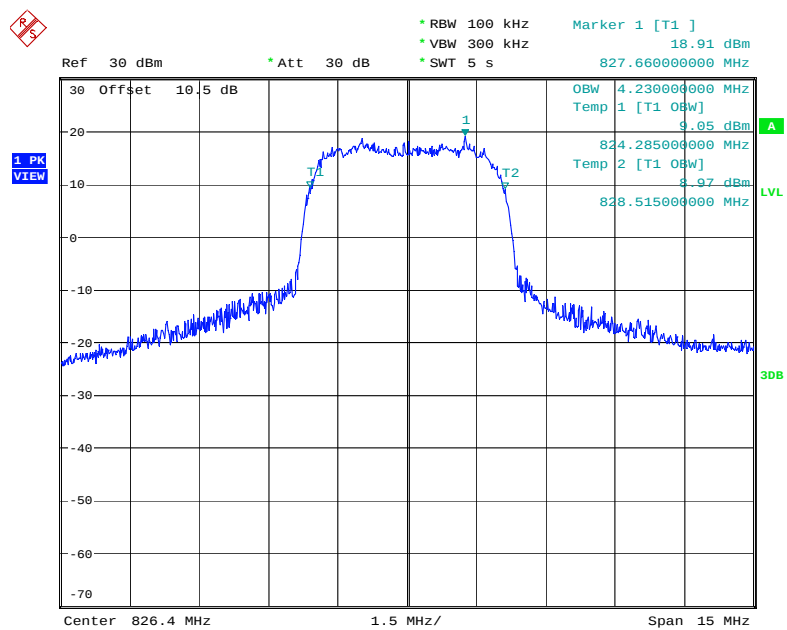


Date: 18.OCT.2022 19:10:21

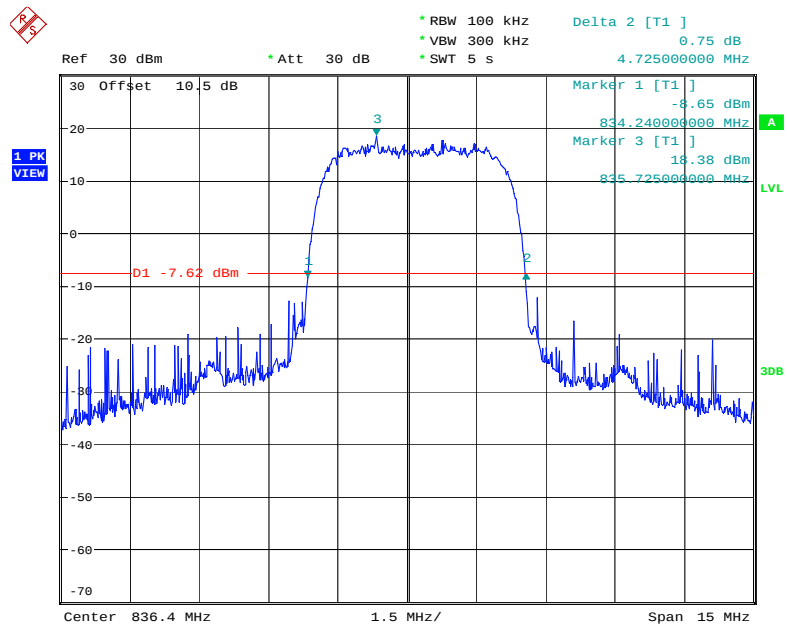
26 dB Emission Bandwidth for HSUPA (QPSK) Mode, Low channel



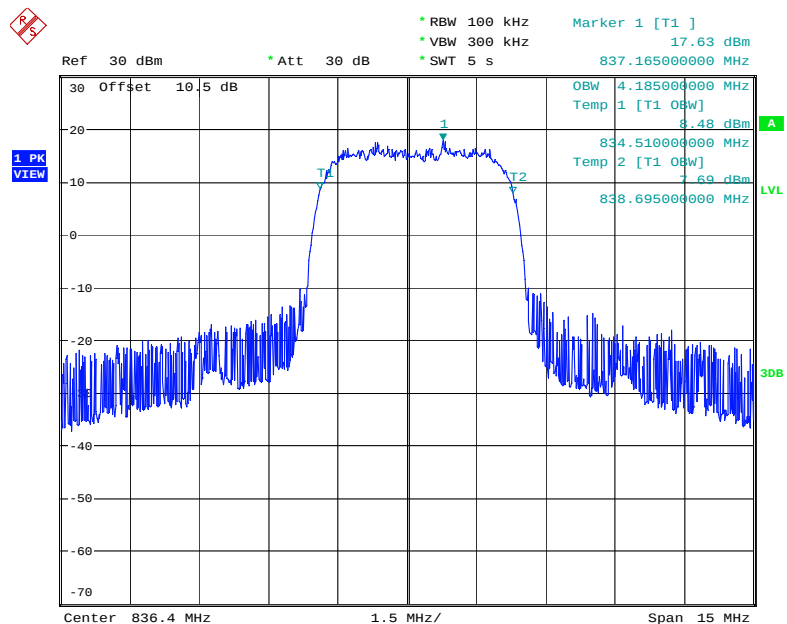
Date: 18.OCT.2022 19:58:38



Date: 18.OCT.2022 19:57:59

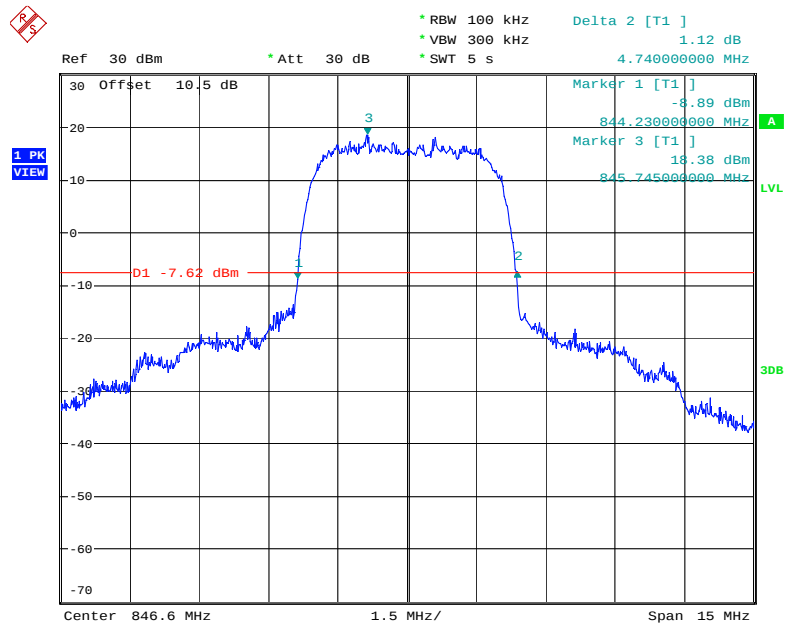
26 dB Emission Bandwidth for HSUPA (QPSK) Mode, Middle channel

Date: 20.OCT.2022 16:17:09

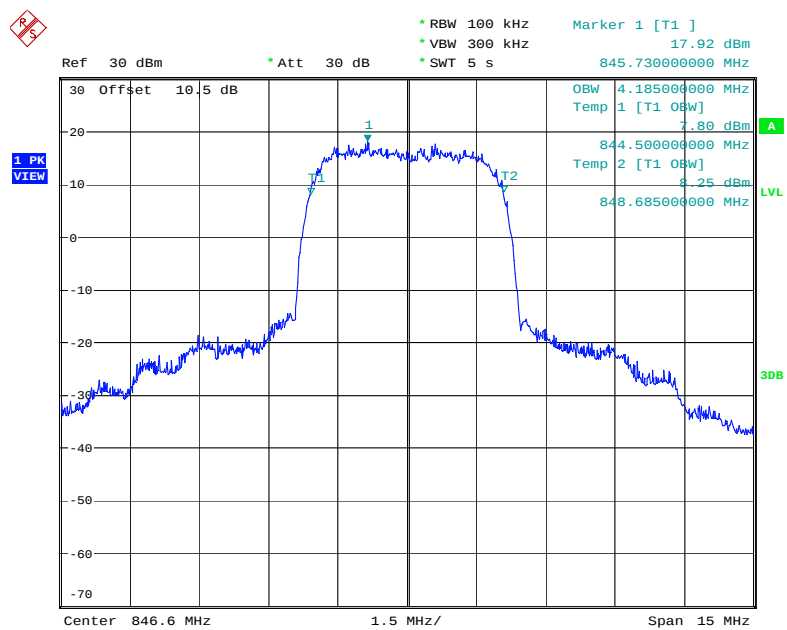


Date: 20.OCT.2022 16:16:29

26 dB Emission Bandwidth for HSUPA (QPSK) Mode, High channel

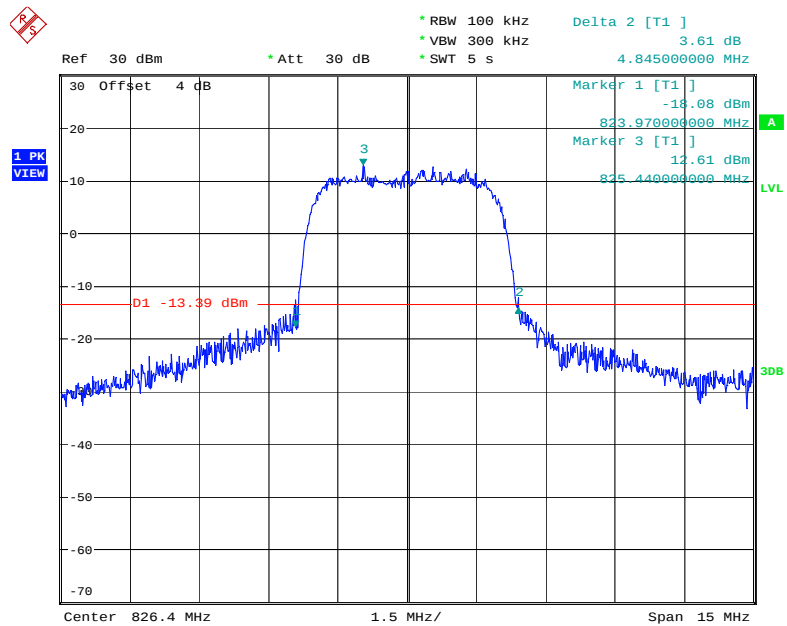


Date: 20.OCT.2022 16:20:03

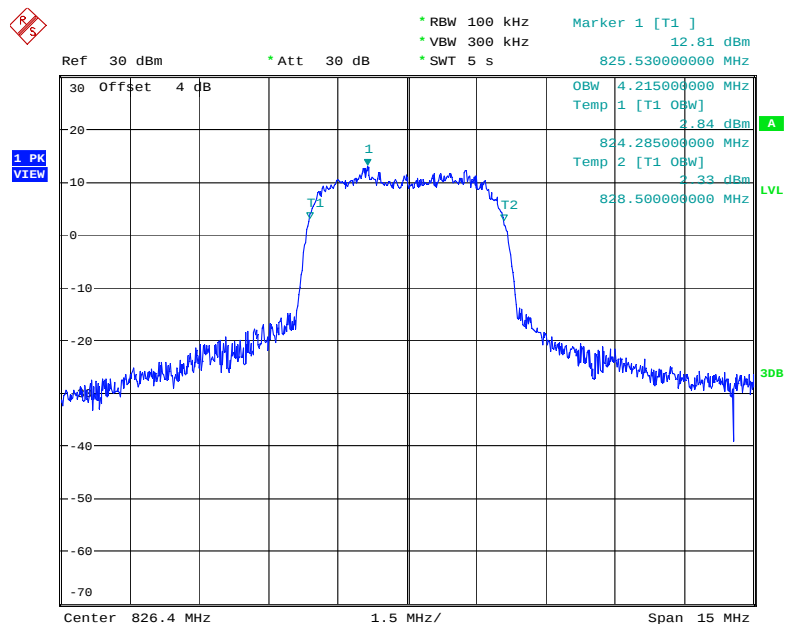


Date: 20.OCT.2022 16:19:24

26 dB Emission Bandwidth for HSDPA (16QAM) Mode, Low channel

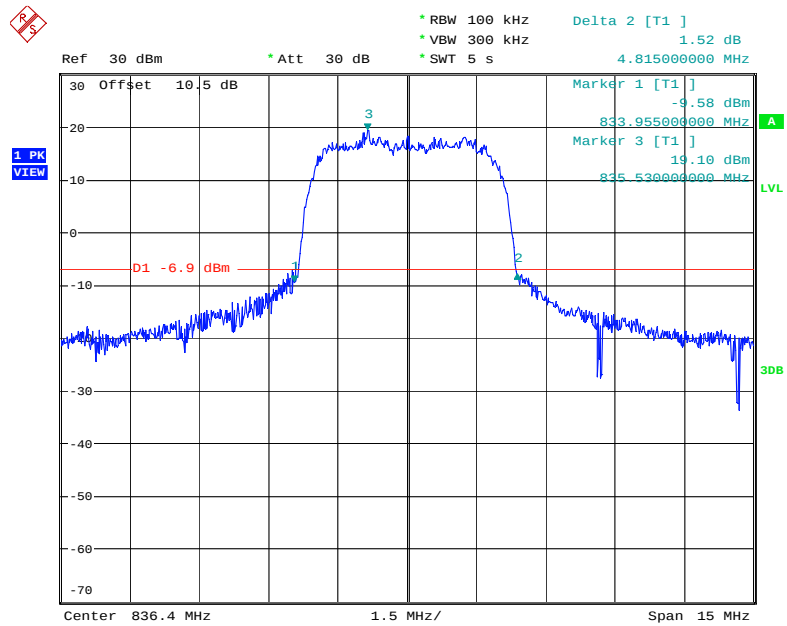


Date: 18.OCT.2022 19:23:36

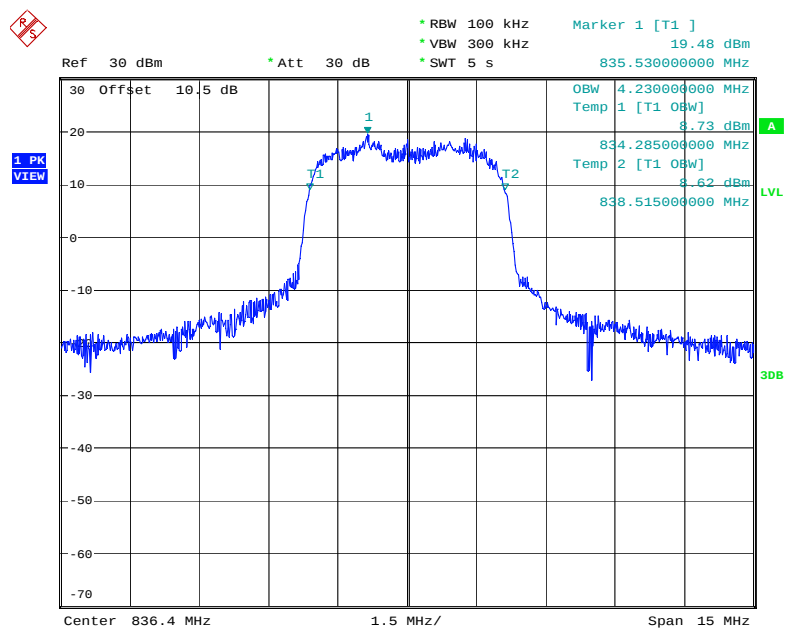


Date: 18.OCT.2022 19:22:58

26 dB Emission Bandwidth for HSDPA (16QAM) Mode, Middle channel

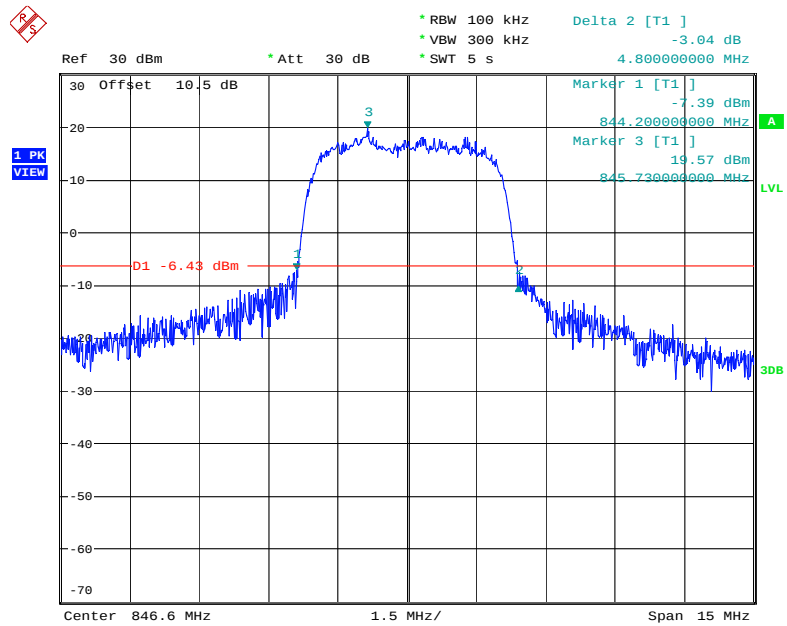


Date: 18.OCT.2022 19:20:27

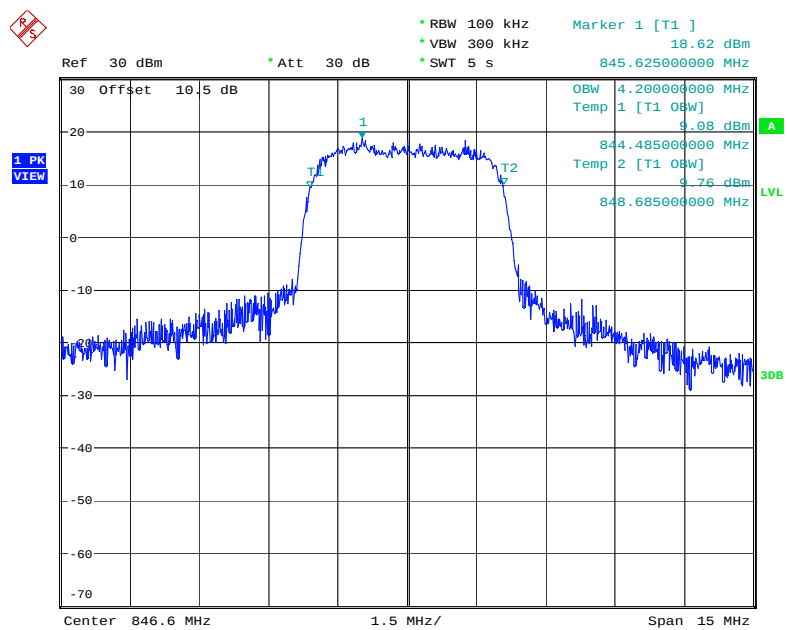


Date: 18.OCT.2022 19:19:48

26 dB Emission Bandwidth for HSDPA (16QAM) Mode, High channel



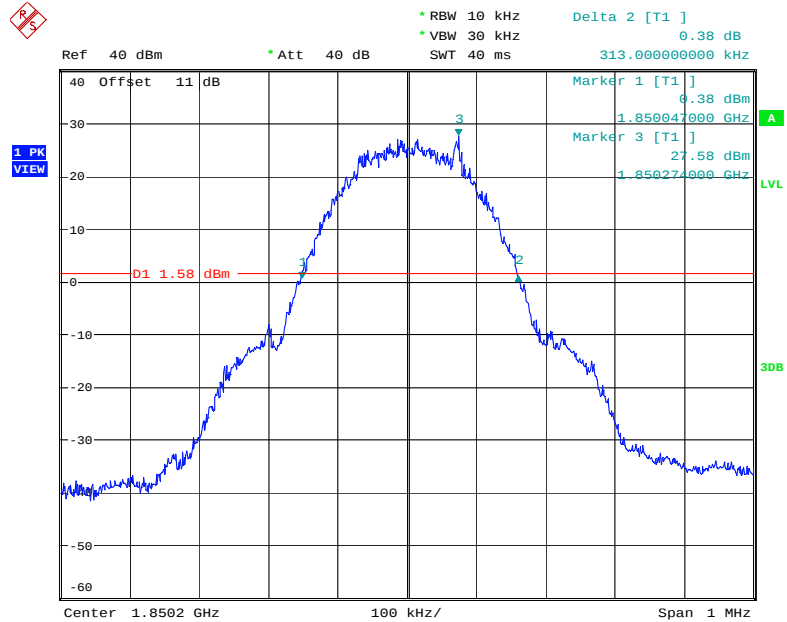
Date: 18.OCT.2022 19:14:49



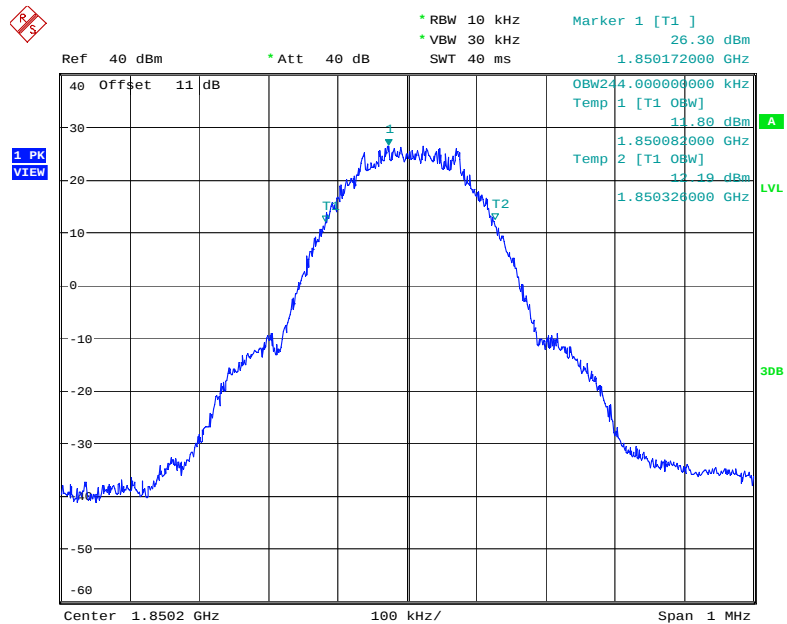
Date: 18.OCT.2022 19:14:11

PCS Band (Part 24E)

26 dB Emission Bandwidth for GSM(GMSK) Mode, Low channel

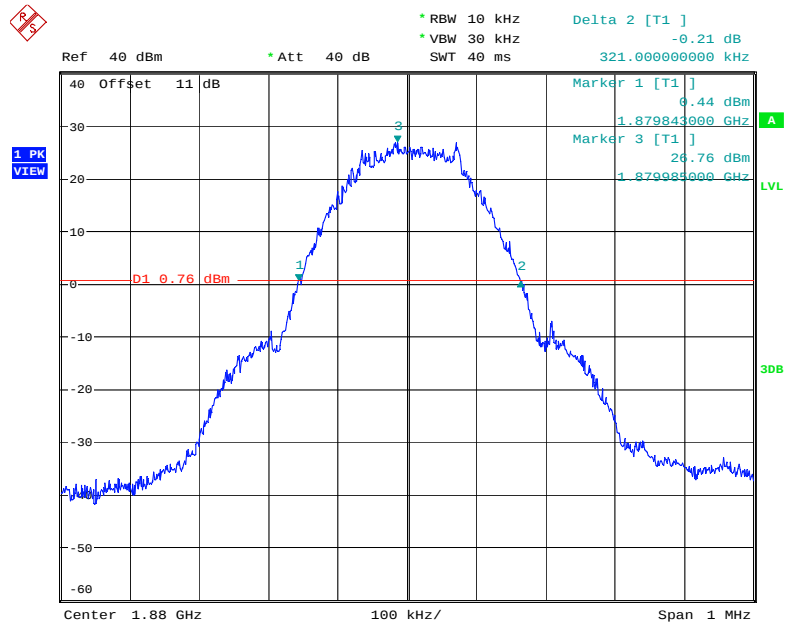


Date: 20.OCT.2022 11:29:26

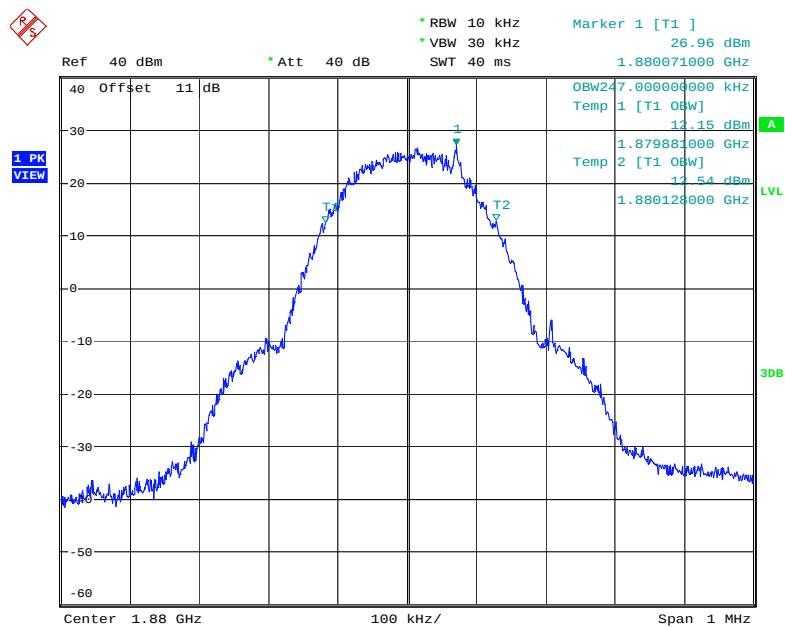


Date: 20.OCT.2022 11:28:47

26 dB Emission Bandwidth for GSM(GMSK) Mode, Middle channel

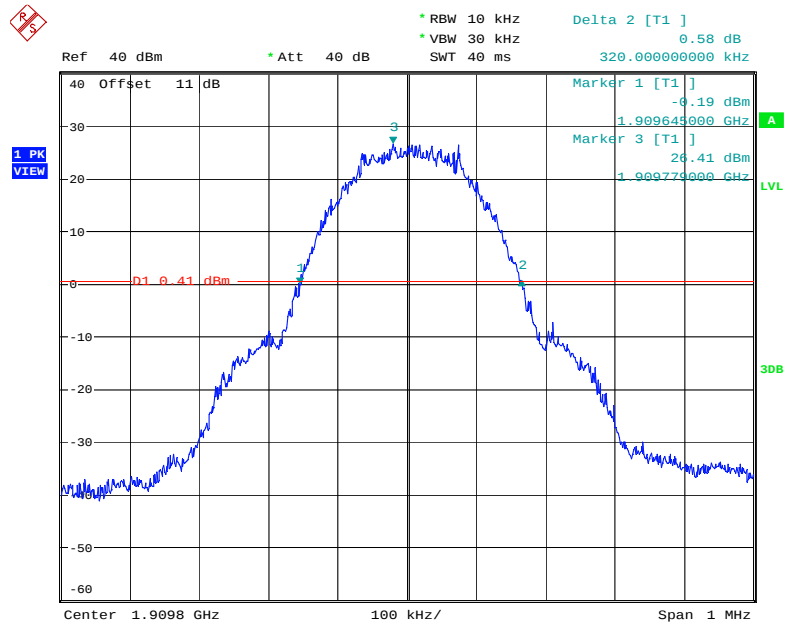


Date: 20.OCT.2022 11:35:48

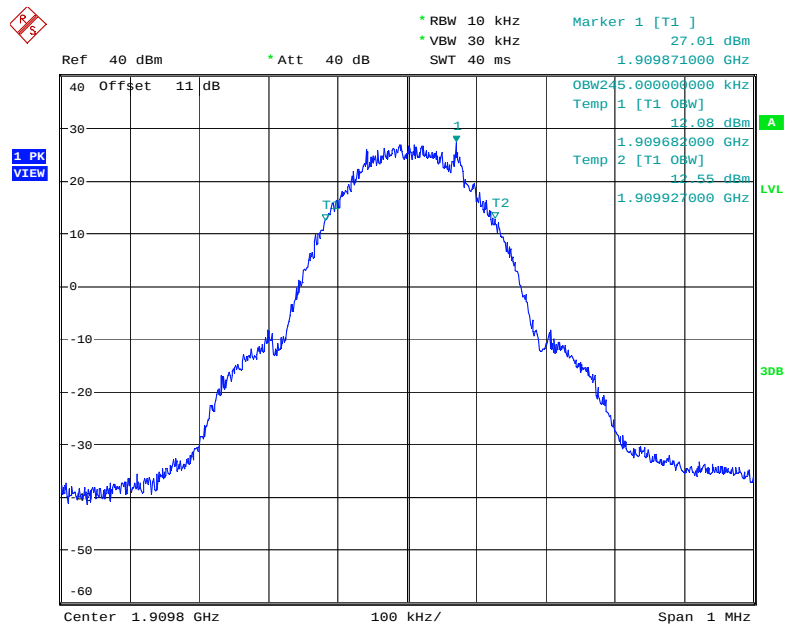


Date: 20.OCT.2022 11:35:09

26 dB Emission Bandwidth for GSM(GMSK) Mode, High channel

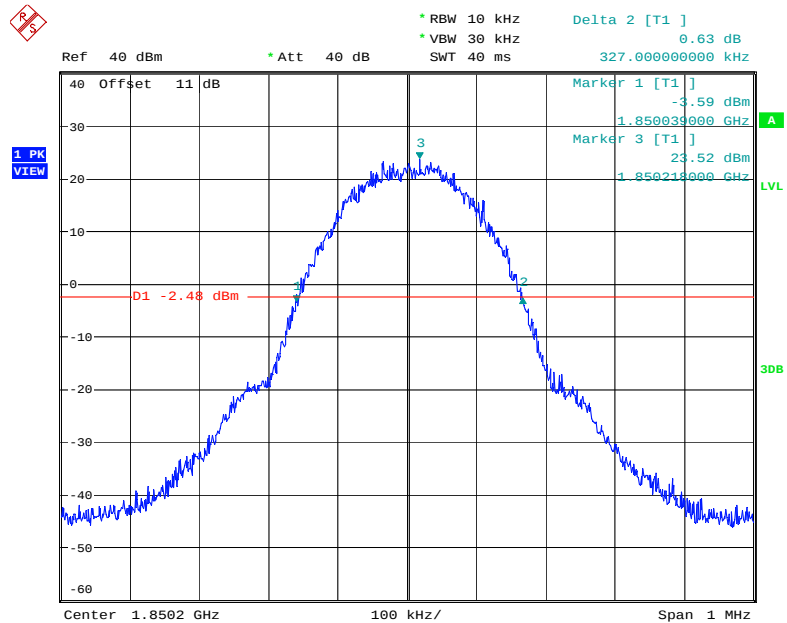


Date: 20.OCT.2022 11:40:13

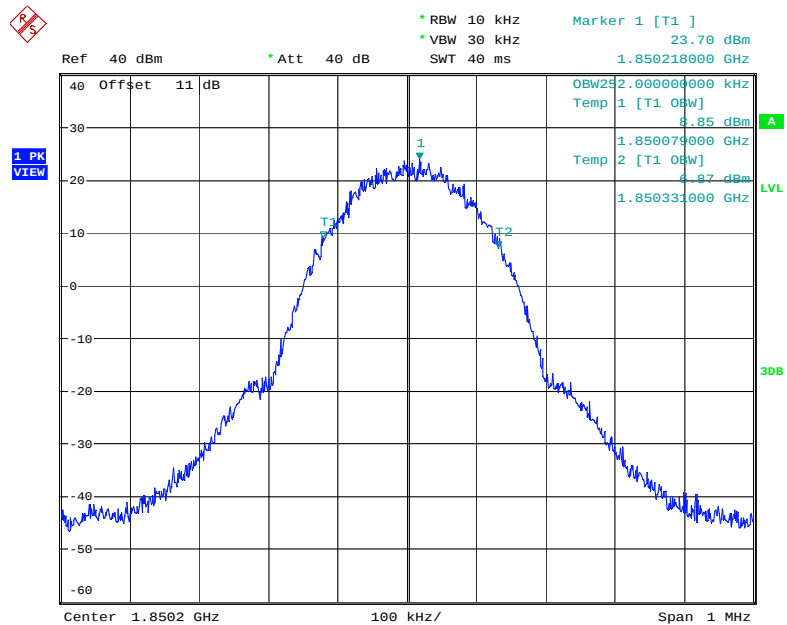


Date: 20.OCT.2022 11:39:34

26 dB Emission Bandwidth for GSM(8PSK) Mode, Low channel

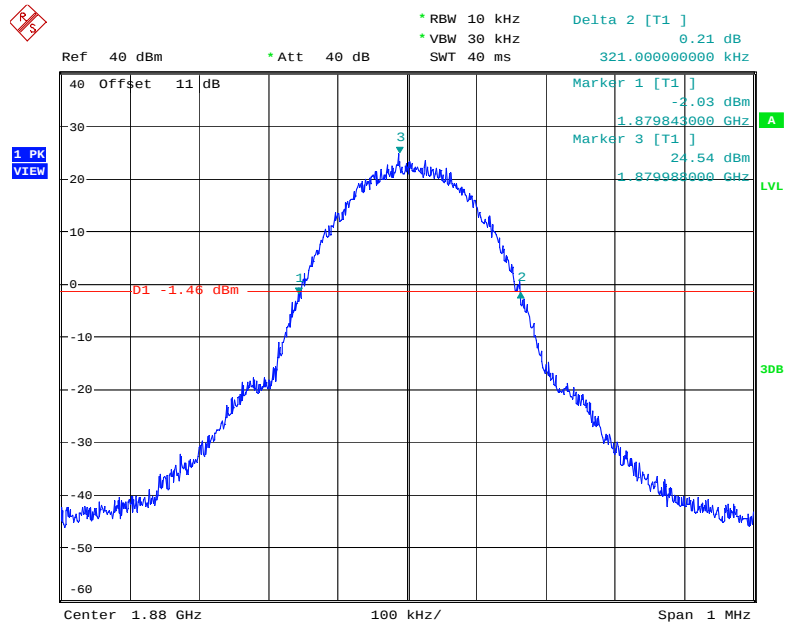


Date: 19.OCT.2022 19:20:22

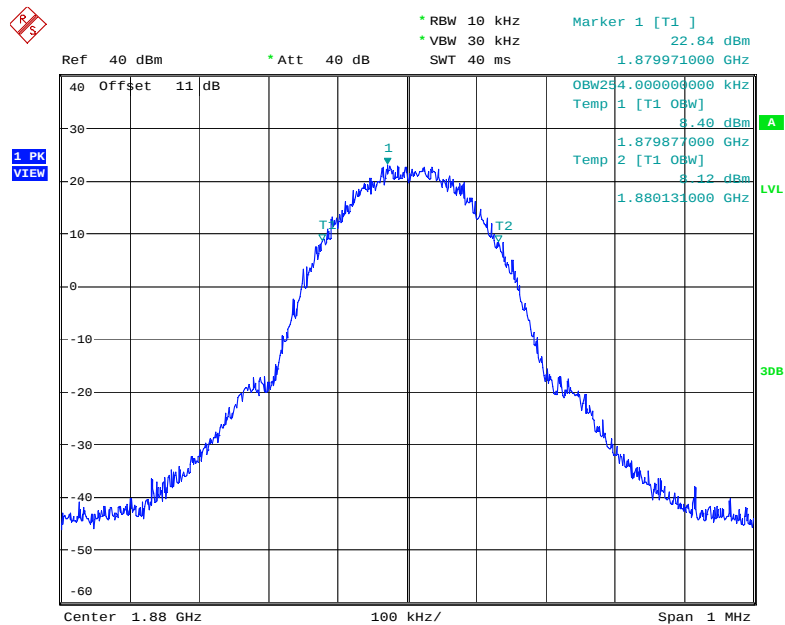


Date: 19.OCT.2022 19:19:41

26 dB Emission Bandwidth for GSM(8PSK) Mode, Middle channel

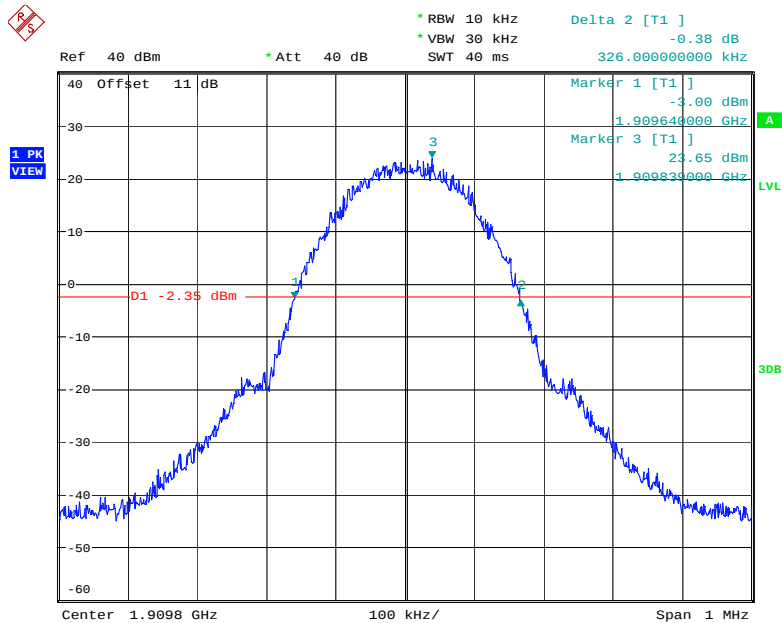


Date: 19.OCT.2022 19:26:10

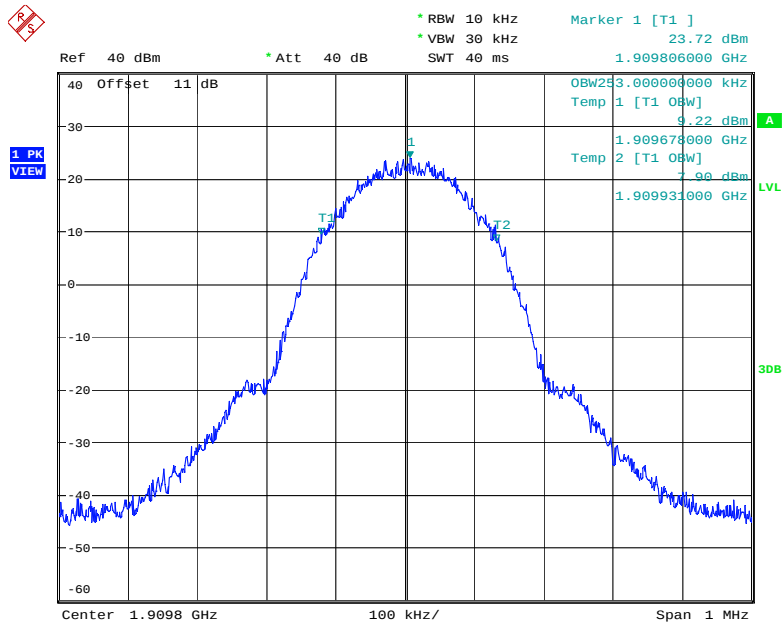


Date: 19.OCT.2022 19:25:31

26 dB Emission Bandwidth for GSM(8PSK) Mode, High channel

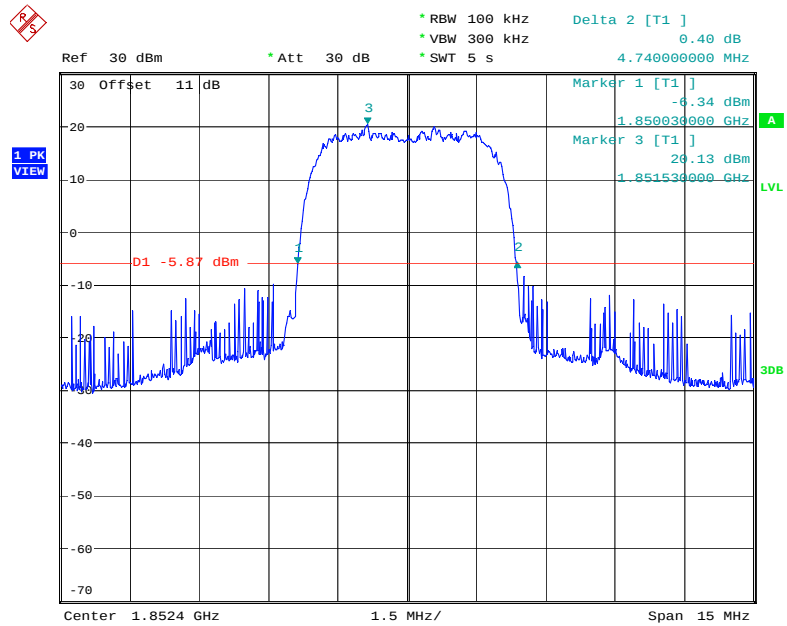


Date: 19.OCT.2022 19:30:44

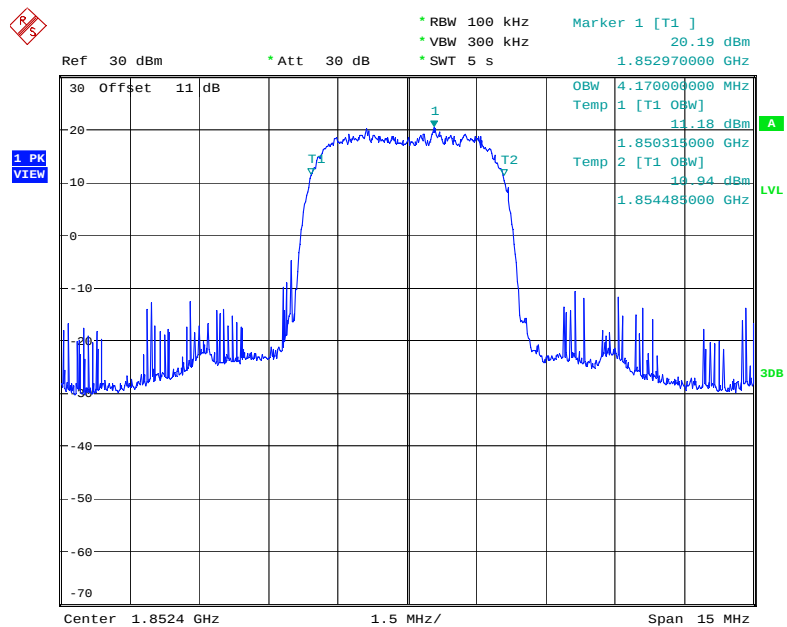


Date: 19.OCT.2022 19:30:05

26 dB Emission Bandwidth for RMC (BPSK) Mode, Low channel

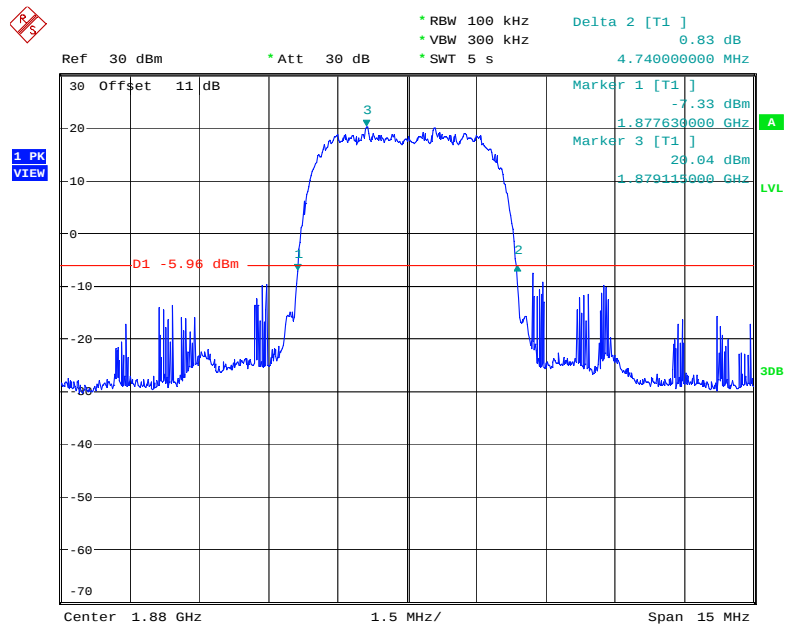


Date: 18.OCT.2022 18:51:46

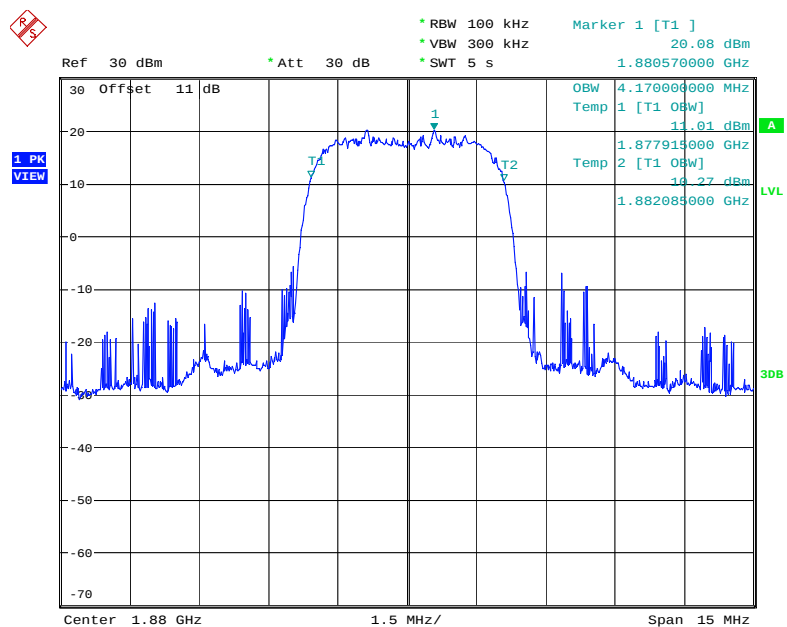


Date: 18.OCT.2022 18:51:06

26 dB Emission Bandwidth for RMC (BPSK) Mode, Middle channel

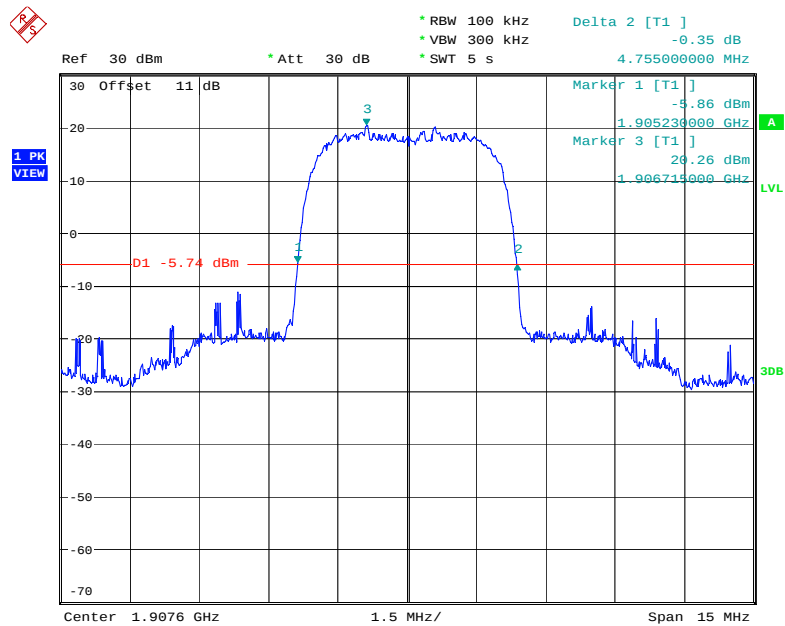


Date: 18.OCT.2022 18:56:02

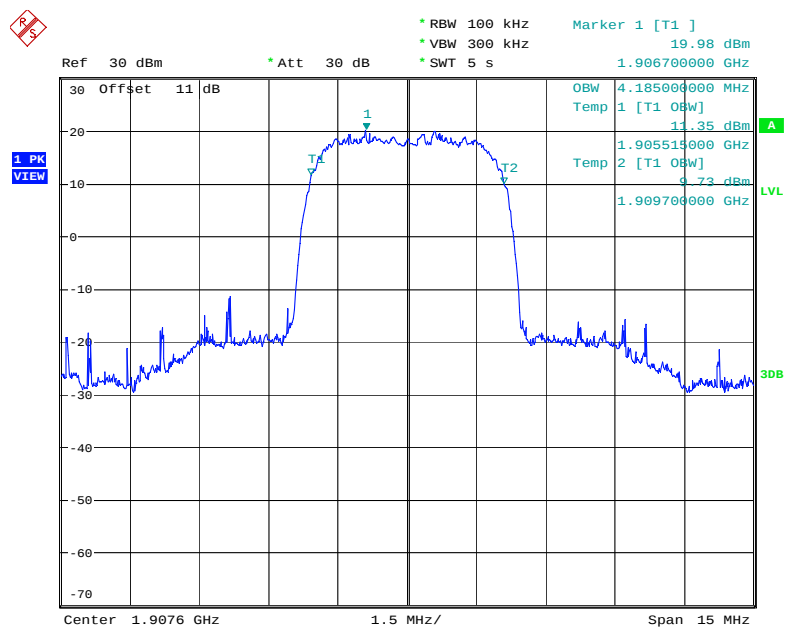


Date: 18.OCT.2022 18:55:22

26 dB Emission Bandwidth for RMC (BPSK) Mode, High channel

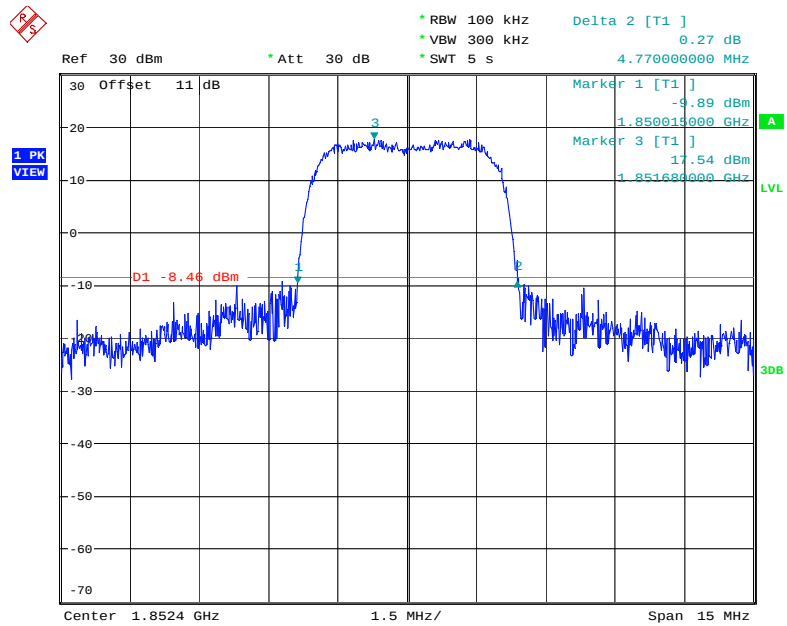


Date: 18.OCT.2022 18:59:52

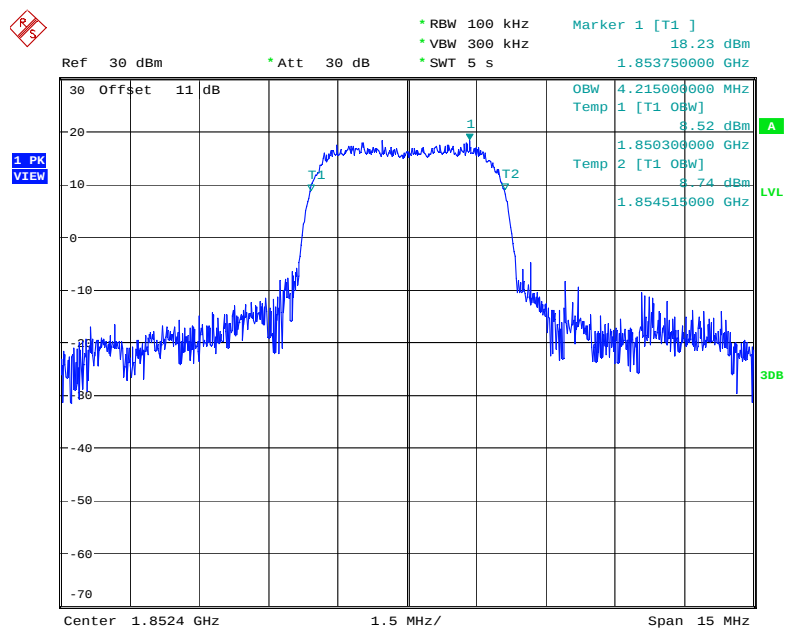


Date: 18.OCT.2022 18:59:13

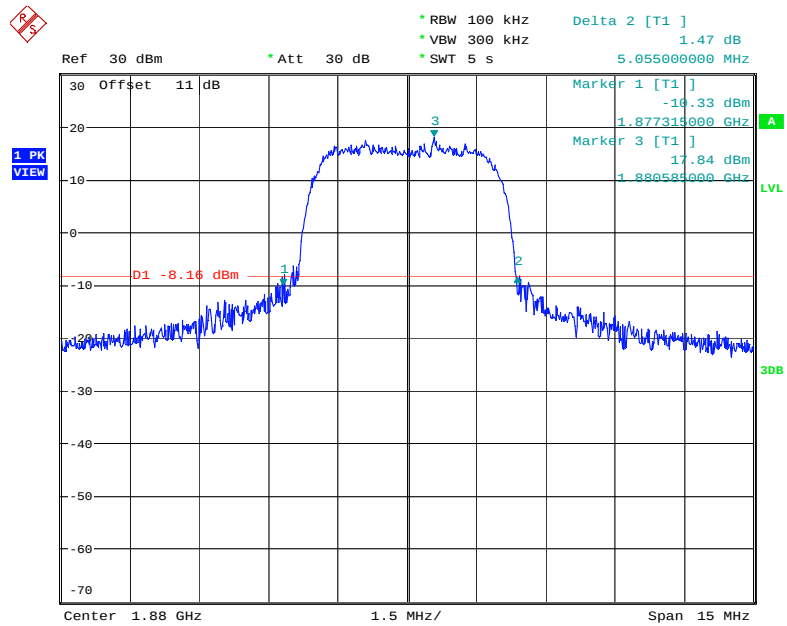
26 dB Emission Bandwidth for HSUPA (QPSK) Mode, Low channel



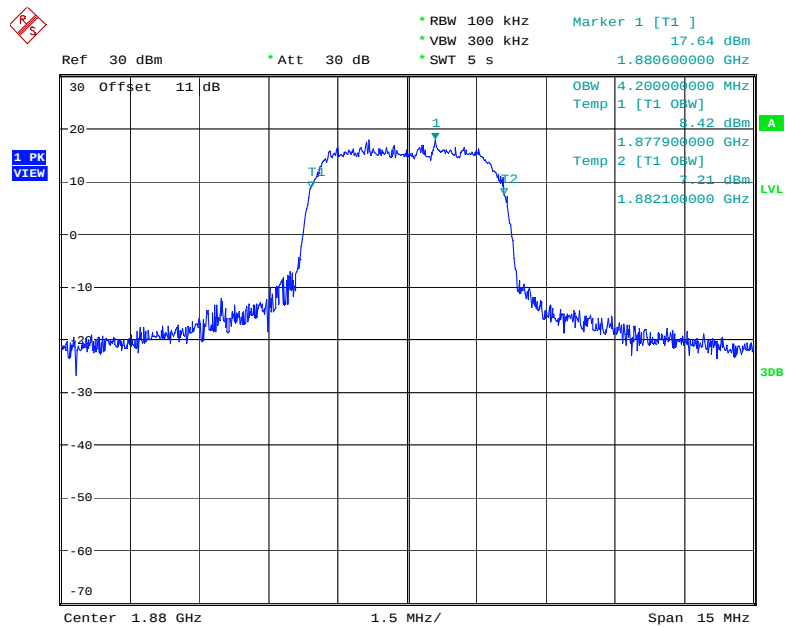
Date: 18.OCT.2022 19:45:25



Date: 18.OCT.2022 19:44:45

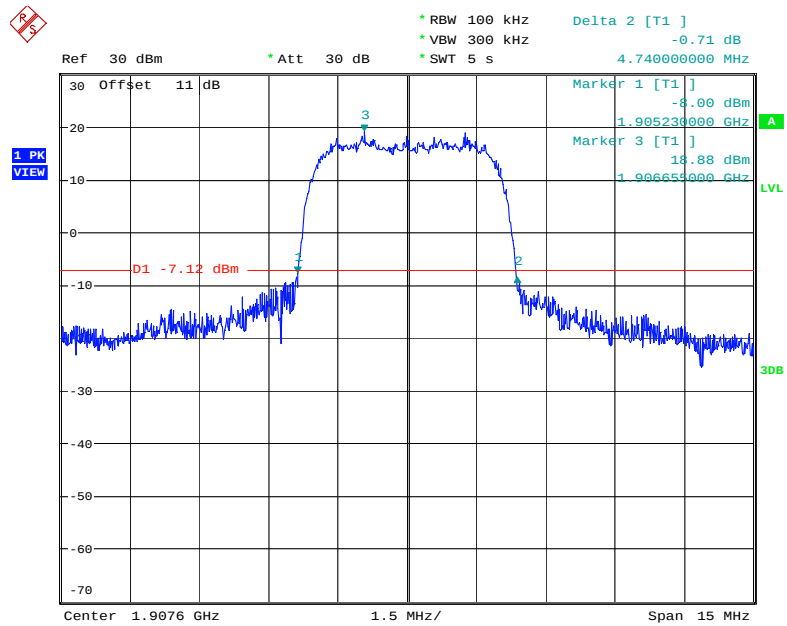
26 dB Emission Bandwidth for HSUPA (QPSK) Mode, Middle channel

Date: 20.OCT.2022 16:25:57

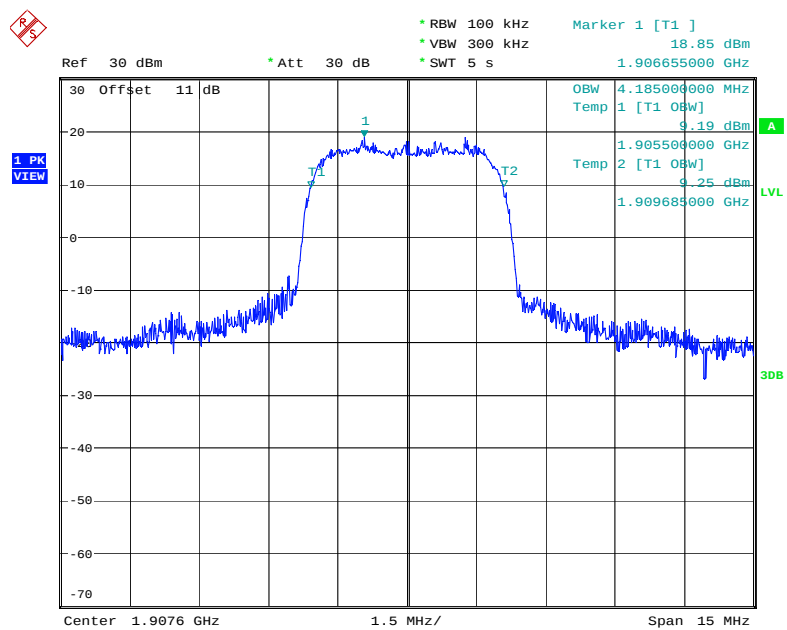


Date: 20.OCT.2022 16:25:18

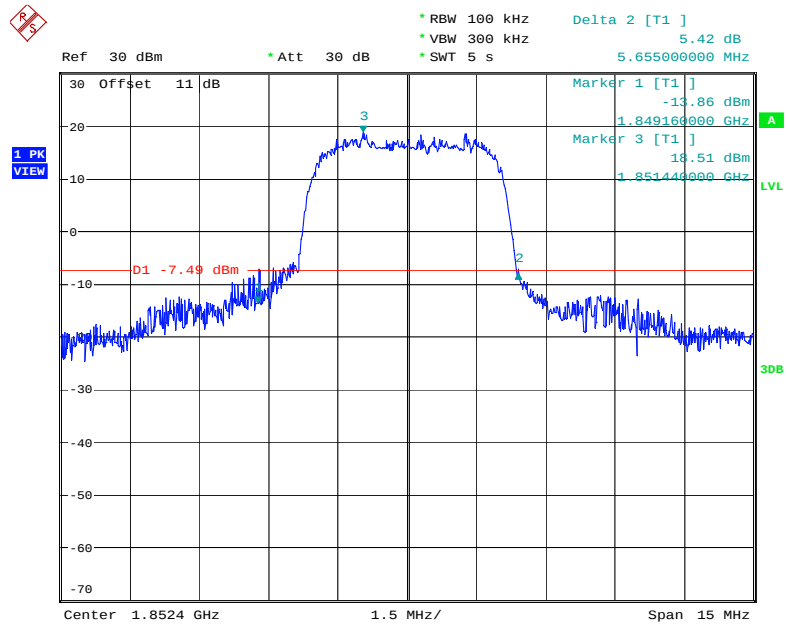
26 dB Emission Bandwidth for HSUPA (QPSK) Mode, High channel



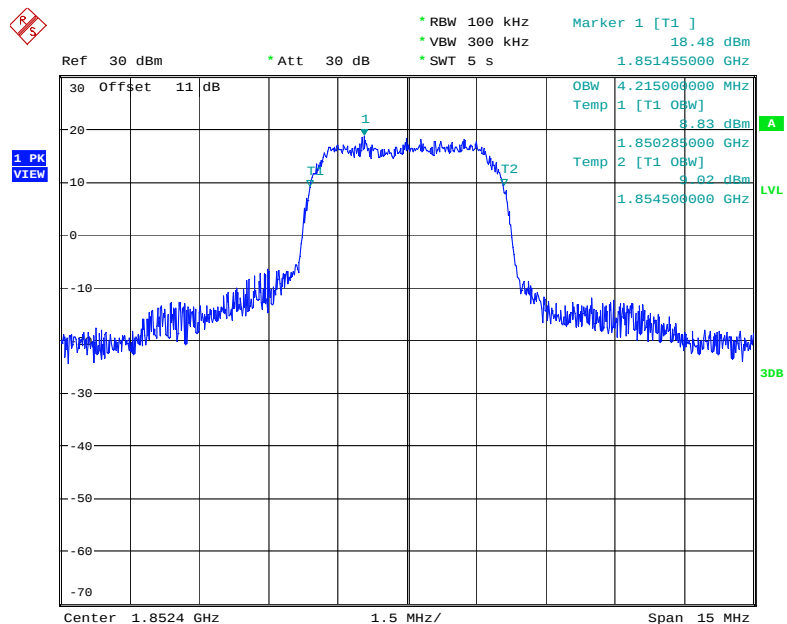
Date: 18.OCT.2022 19:53:53



Date: 18.OCT.2022 19:53:14

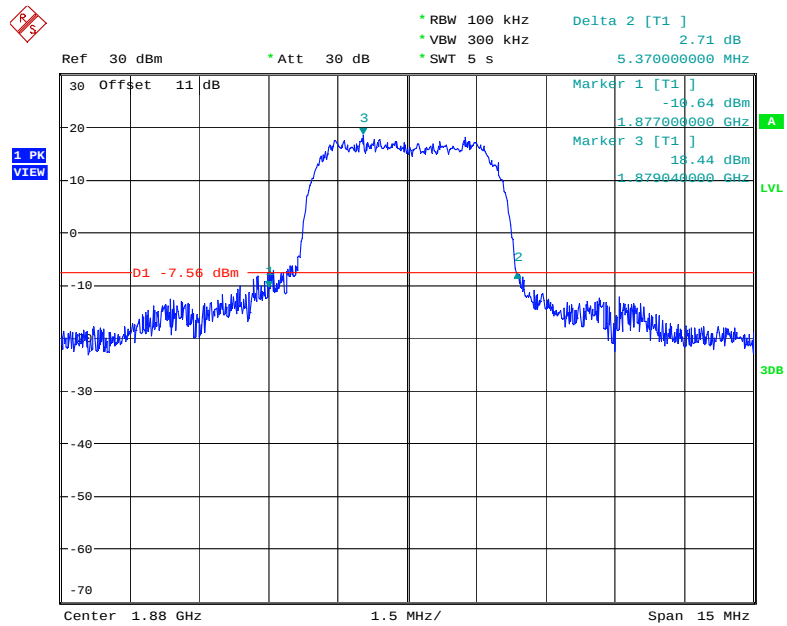
26 dB Emission Bandwidth for HSDPA (16QAM) Mode, Low channel

Date: 18.OCT.2022 19:34:58

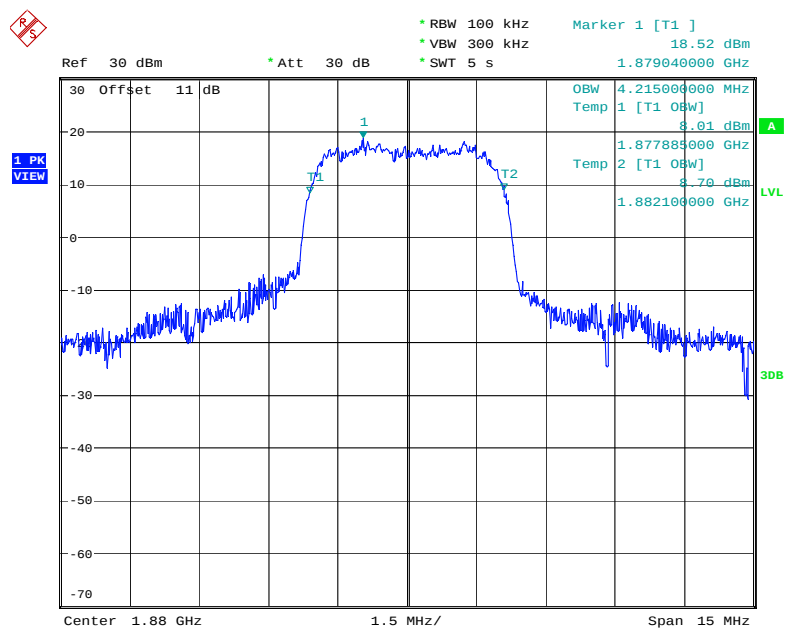


Date: 18.OCT.2022 19:34:19

26 dB Emission Bandwidth for HSDPA (16QAM) Mode, Middle channel

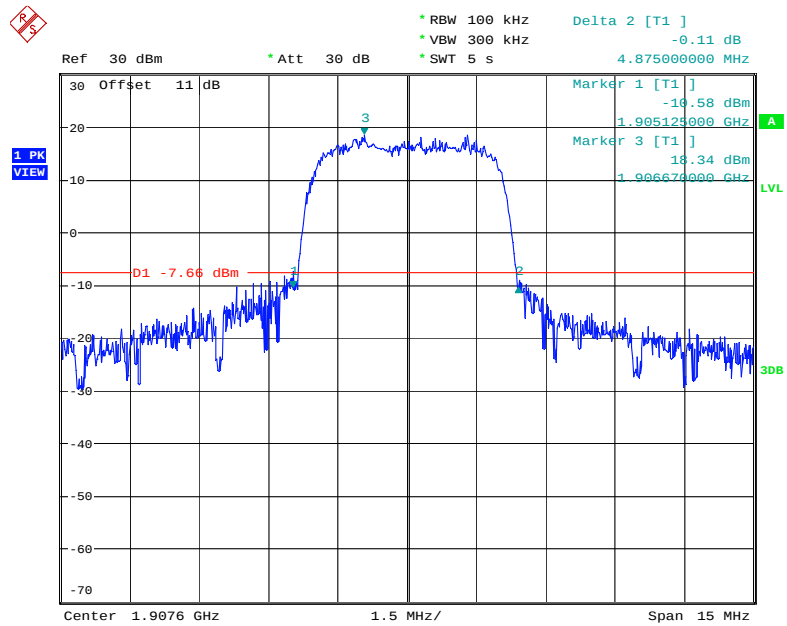


Date: 18.OCT.2022 19:31:32

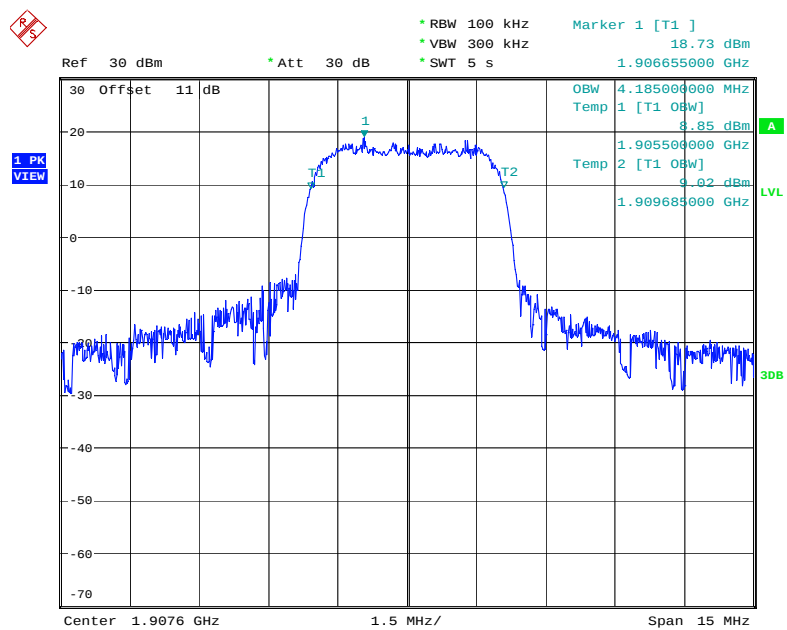


Date: 18.OCT.2022 19:30:52

26 dB Emission Bandwidth for HSDPA (16QAM) Mode, High channel



Date: 18.OCT.2022 19:27:30



Date: 18.OCT.2022 19:26:51

LTE Band 2:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.110	1.296	1.104	1.308	1.104	1.326
	16QAM	1.104	1.302	1.104	1.320	1.098	1.284
3 MHz	QPSK	2.700	2.892	2.688	2.892	2.688	2.880
	16QAM	2.688	2.880	2.676	2.880	2.688	2.880
5 MHz	QPSK	4.540	5.140	4.560	5.240	4.540	5.180
	16QAM	4.560	5.260	4.540	5.140	4.540	5.180
10 MHz	QPSK	9.000	9.880	8.960	9.840	8.960	9.960
	16QAM	9.000	10.000	9.000	9.920	9.000	9.960
15 MHz	QPSK	13.560	15.300	13.620	15.300	13.560	15.240
	16QAM	13.620	15.180	13.560	15.240	13.560	15.240
20 MHz	QPSK	17.920	19.600	18.000	19.680	18.080	19.840
	16QAM	18.000	19.760	18.080	19.920	17.920	19.840

LTE Band 4:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.104	1.308	1.104	1.296	1.104	1.308
	16QAM	1.098	1.296	1.104	1.302	1.104	1.320
3 MHz	QPSK	2.700	2.880	2.700	2.892	2.688	2.880
	16QAM	2.688	2.880	2.676	2.880	2.688	2.952
5 MHz	QPSK	4.540	5.160	4.540	5.220	4.540	5.220
	16QAM	4.540	5.240	4.520	5.220	4.540	5.180
10 MHz	QPSK	9.000	9.920	8.960	10.040	9.000	9.880
	16QAM	8.960	9.920	8.960	9.880	9.000	9.760
15 MHz	QPSK	13.560	15.240	13.620	15.240	13.620	15.300
	16QAM	13.560	15.240	13.500	15.120	13.560	15.240
20 MHz	QPSK	18.000	19.760	18.000	19.680	18.000	19.760
	16QAM	18.080	19.840	18.000	19.600	18.080	19.840

LTE Band 5:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.116	1.338	1.104	1.314	1.104	1.314
	16QAM	1.104	1.320	1.110	1.308	1.092	1.290
3 MHz	QPSK	2.688	2.868	2.676	2.880	2.688	2.892
	16QAM	2.688	2.892	2.688	2.880	2.688	2.868
5 MHz	QPSK	4.540	5.220	4.520	5.180	4.520	5.200
	16QAM	4.580	5.240	4.520	5.200	4.540	5.200
10 MHz	QPSK	8.960	9.960	8.960	10.000	8.960	9.880
	16QAM	8.960	9.880	8.960	9.760	8.960	9.840

LTE Band 7:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
5 MHz	QPSK	4.520	5.120	4.540	5.240	4.580	5.740
	16QAM	4.540	5.180	4.540	5.240	4.560	5.320
10 MHz	QPSK	8.960	9.800	9.000	10.120	9.040	10.280
	16QAM	8.960	9.920	9.000	9.880	9.000	10.080
15 MHz	QPSK	13.620	15.120	13.620	15.360	13.620	15.300
	16QAM	13.500	15.240	13.620	15.120	13.620	15.060
20 MHz	QPSK	17.920	19.520	18.080	19.840	18.000	19.680
	16QAM	17.920	19.440	18.000	19.920	18.000	19.680

LTE Band 12:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.098	1.308	1.104	1.302	1.110	1.368
	16QAM	1.092	1.290	1.104	1.308	1.110	1.338
3 MHz	QPSK	2.688	2.880	2.688	2.880	2.700	2.904
	16QAM	2.676	2.892	2.688	2.892	2.688	2.868
5 MHz	QPSK	4.540	5.200	4.520	5.160	4.540	5.240
	16QAM	4.540	5.200	4.560	5.200	4.520	5.220
10 MHz	QPSK	8.960	9.760	8.960	9.960	8.960	9.880
	16QAM	8.960	9.720	8.960	9.800	9.000	9.920

LTE Band 13:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
5 MHz	QPSK	4.540	5.180	4.520	5.180	4.560	5.240
	16QAM	4.540	5.180	4.560	5.220	4.540	5.160
10 MHz	QPSK	/	/	8.960	9.840	/	/
	16QAM	/	/	8.960	9.840	/	/

LTE Band 66

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.104	1.314	1.104	1.308	1.122	1.374
	16QAM	1.098	1.296	1.104	1.302	1.110	1.290
3 MHz	QPSK	2.688	2.868	2.688	2.892	2.700	2.892
	16QAM	2.688	2.868	2.688	2.880	2.688	2.892
5 MHz	QPSK	4.520	5.180	4.560	5.280	4.540	5.220
	16QAM	4.540	5.220	4.540	5.200	4.540	5.180
10 MHz	QPSK	9.000	9.920	9.000	9.920	8.960	9.840
	16QAM	8.960	9.920	9.000	9.880	9.000	9.800
15 MHz	QPSK	13.560	15.240	13.500	15.180	13.560	15.300
	16QAM	13.560	15.180	13.620	15.180	13.560	15.180
20 MHz	QPSK	18.000	19.920	18.000	19.840	18.000	19.600
	16QAM	18.080	19.840	18.000	19.760	17.920	19.680

The test plots of LTE band please refer to the Appendix A.

FCC §2.1051, §22.917(a) & §24.238(a)& §27.53 - SPURIOUS EMISSIONS AT ANTENNA TERMINALS

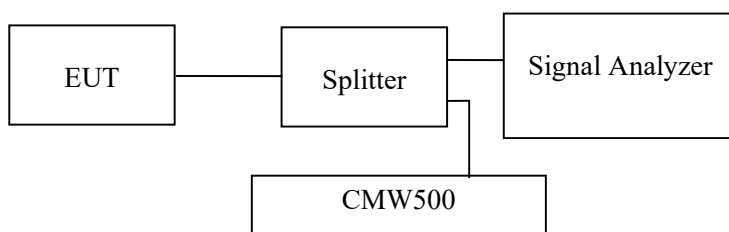
Applicable Standard

FCC §2.1051, §22.917(a) & §24.238(a)&§27.53.

The spectrum was to be investigated to the tenth harmonics of the highest fundamental frequency as specified in § 2.1051.

Test Procedure

The RF output of the transceiver was connected to a spectrum analyzer and simulator through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 1MHz. Sufficient scans were taken to show any out of band emissions up to 10th harmonic.



Note: the worst path loss (cable loss and splitter inset loss) among the test frequency range has added into plot.

Test Data

Environmental Conditions

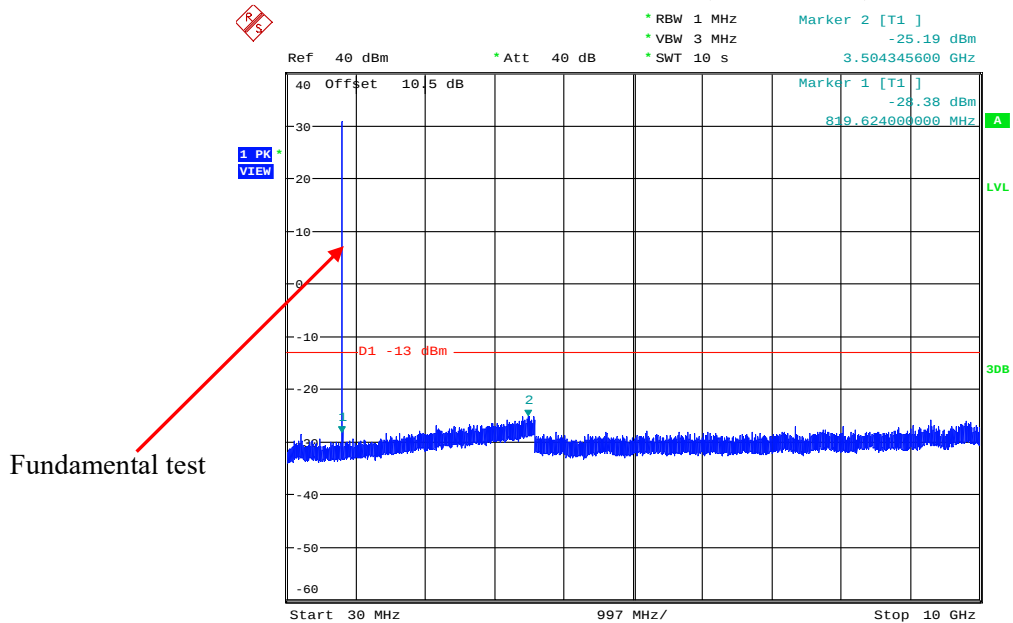
Temperature:	25.7℃
Relative Humidity:	60 %
ATM Pressure:	101.0 kPa

The testing was performed by Cat Kang from 2022-10-19 to 2022-11-24.

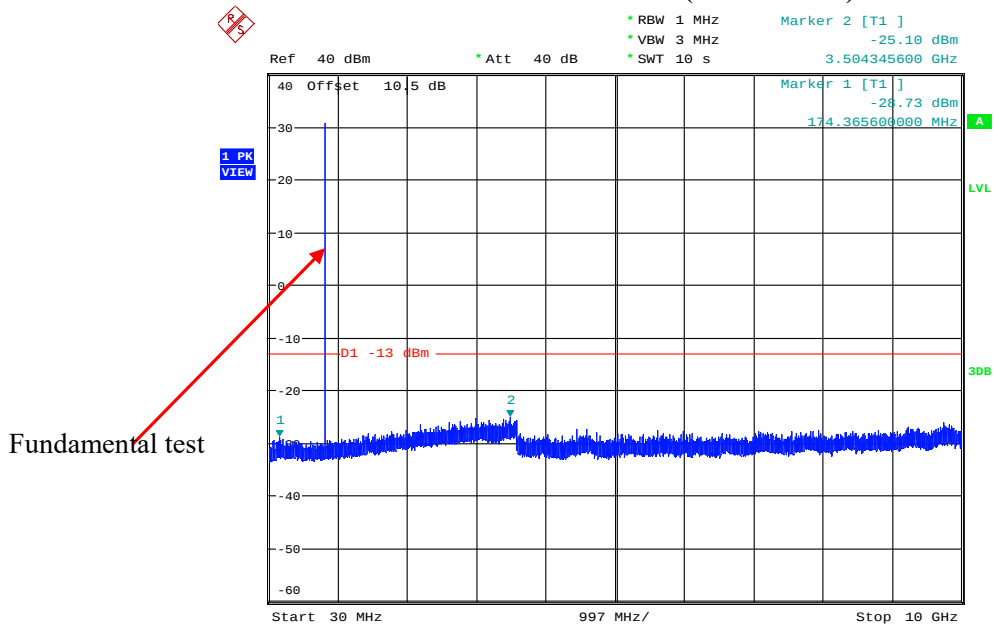
EUT operation mode: Transmitting

Test result: Pass

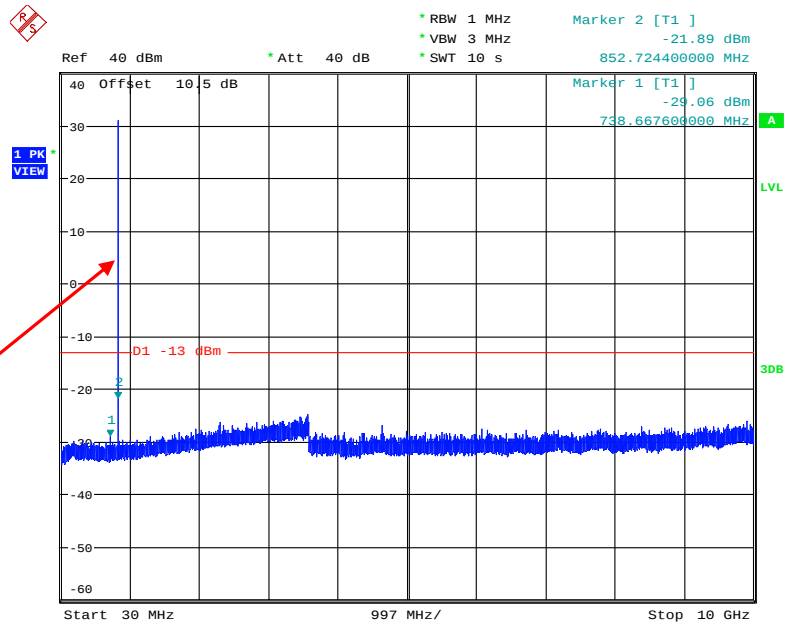
Please refer to the following plots.

Cellular Band (Part 22H)**Low Channel:****30 MHz – 10GHz (GPRS Mode)**

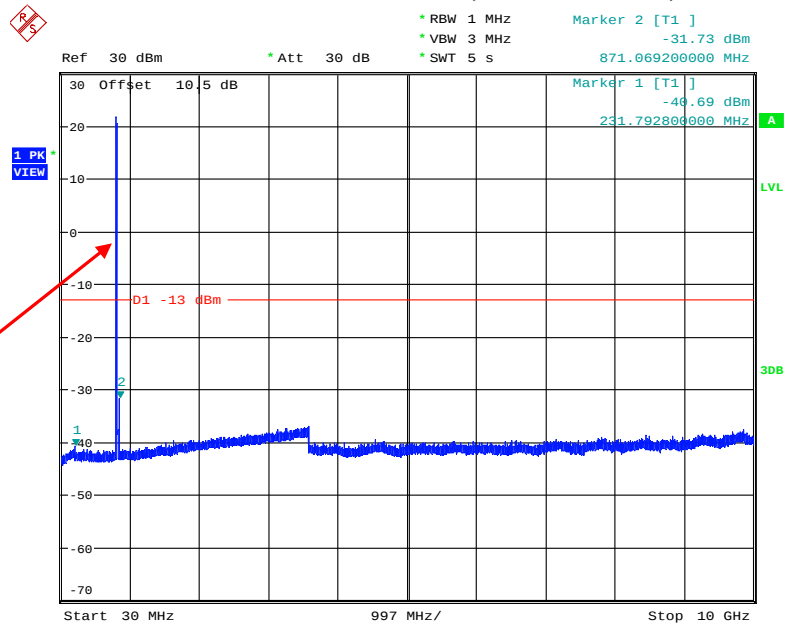
Date: 24.NOV.2022 15:58:00

Middle Channel:**30 MHz – 10GHz (GPRS Mode)**

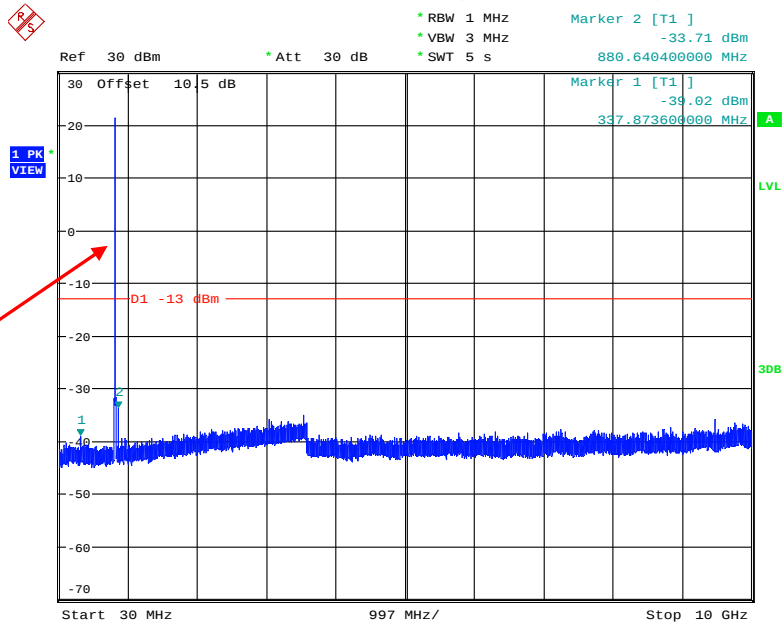
Date: 24.NOV.2022 15:55:02

High Channel:**30 MHz – 10GHz (GPRS Mode)**

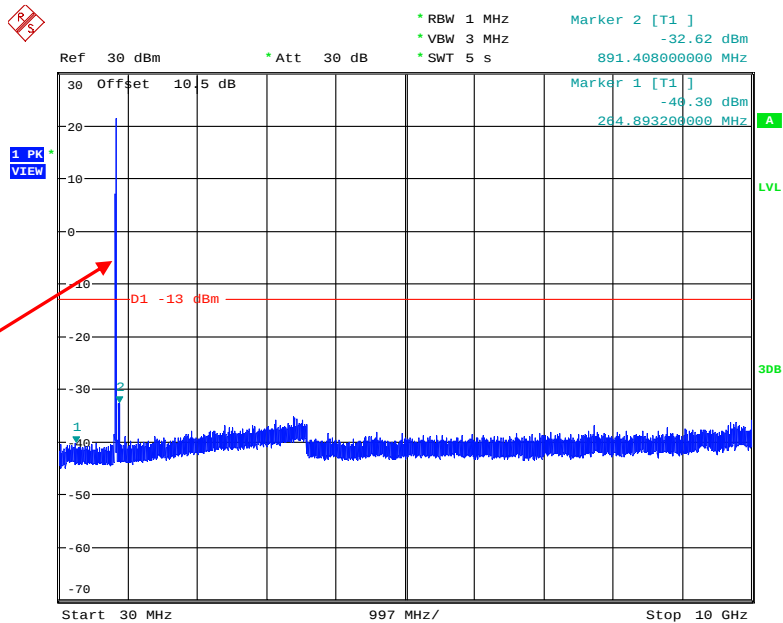
Date: 24.NOV.2022 15:57:00

Low Channel:**30 MHz – 10GHz (WCDMA Mode)**

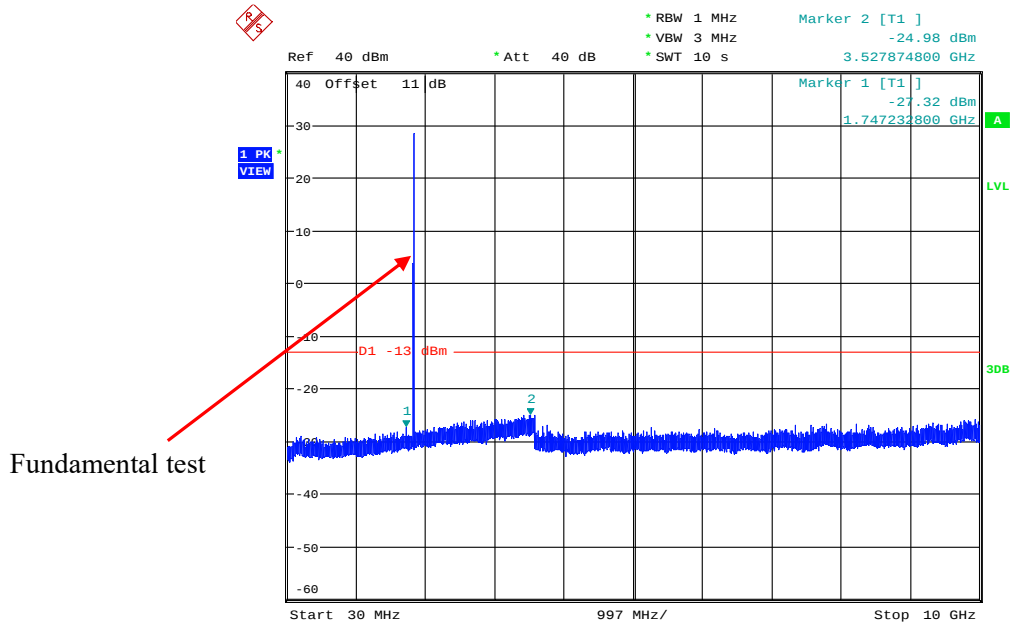
Date: 24.NOV.2022 15:08:26

Middle Channel:**30 MHz – 10GHz (WCDMA Mode)**

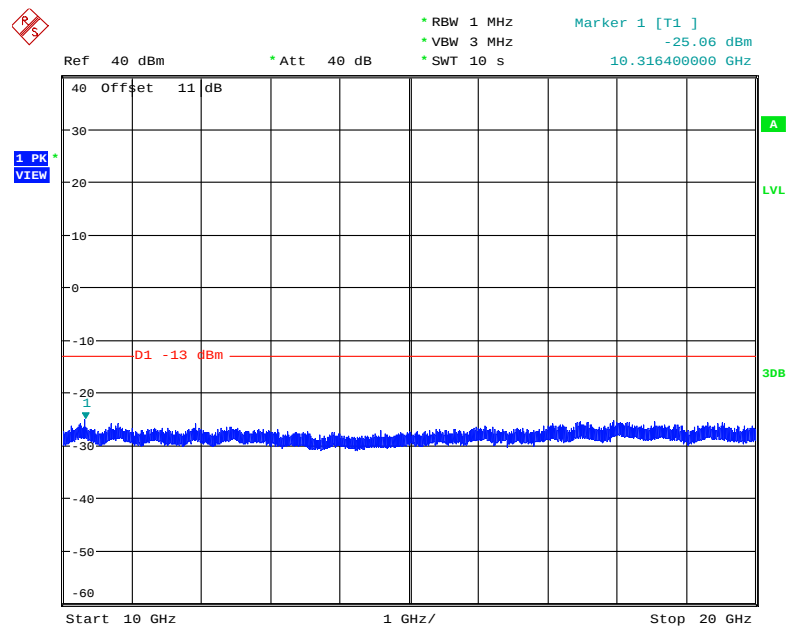
Date: 24.NOV.2022 15:09:35

High Channel:**30 MHz – 10GHz RMC (WCDMA Mode)**

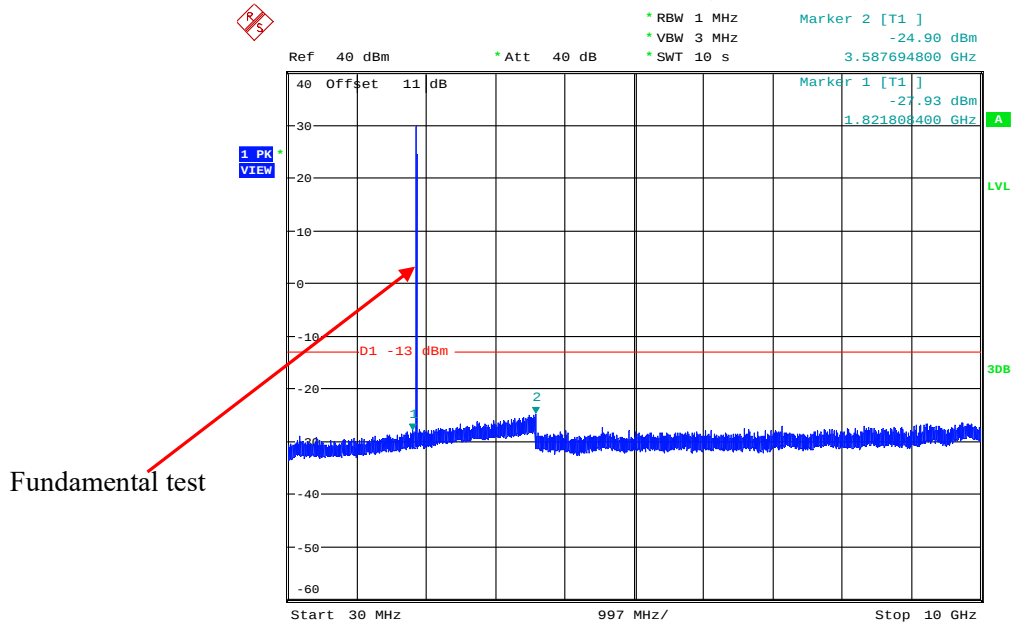
Date: 24.NOV.2022 15:10:51

PCS Band (Part 24E)**Low Channel:****30 MHz – 10GHz (GPRS Mode)**

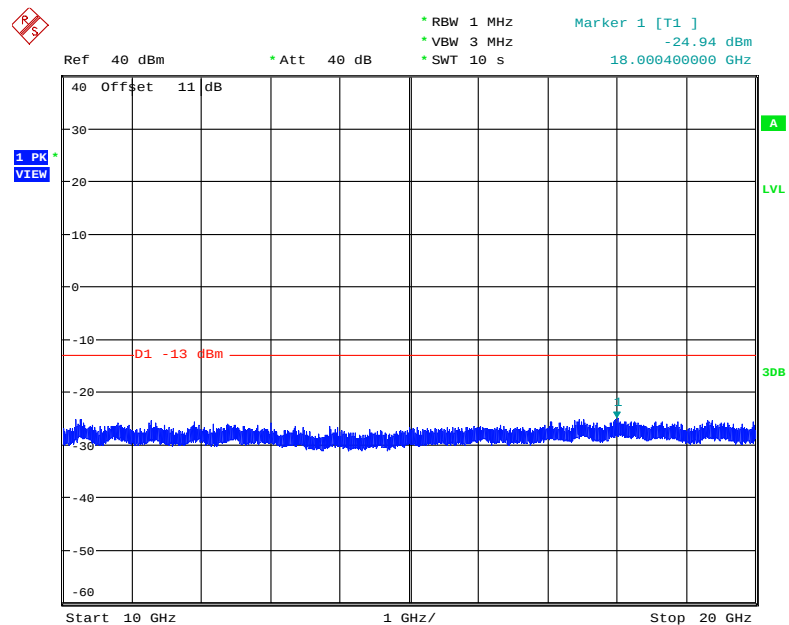
Date: 24.NOV.2022 16:03:53

10 GHz – 20GHz (GPRS Mode)

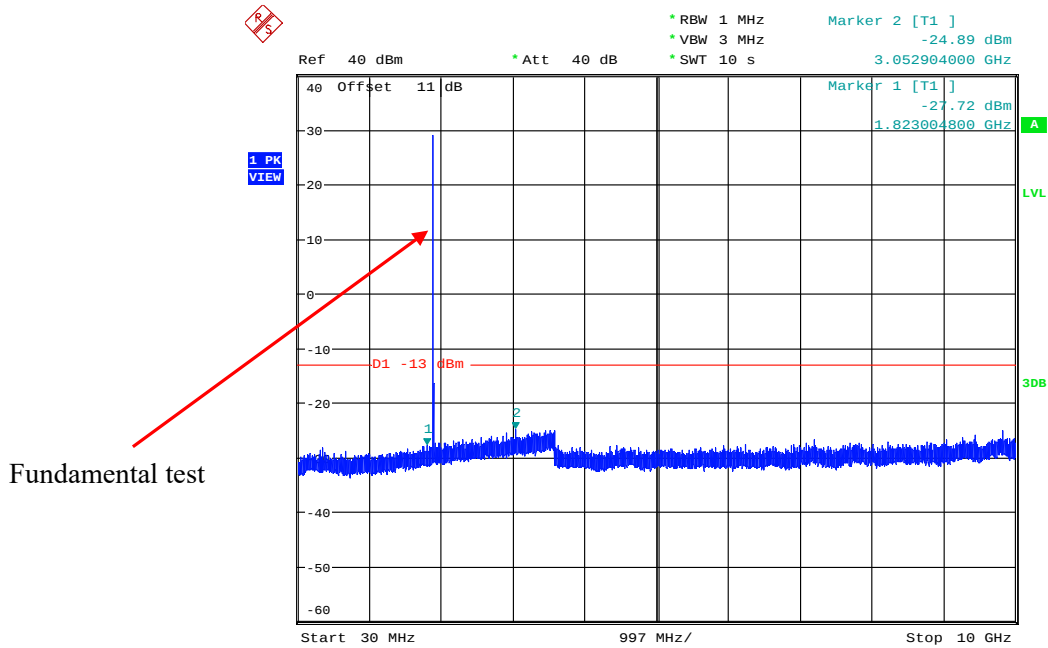
Date: 24.NOV.2022 16:04:52

Middle Channel:**30 MHz – 10GHz (GPRS Mode)**

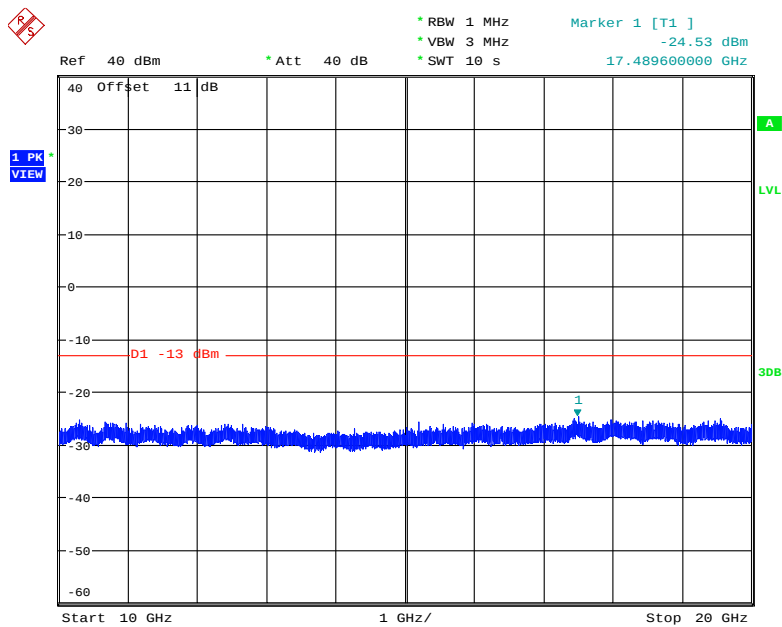
Date: 24.NOV.2022 16:05:46

10 GHz – 20GHz (GPRS Mode)

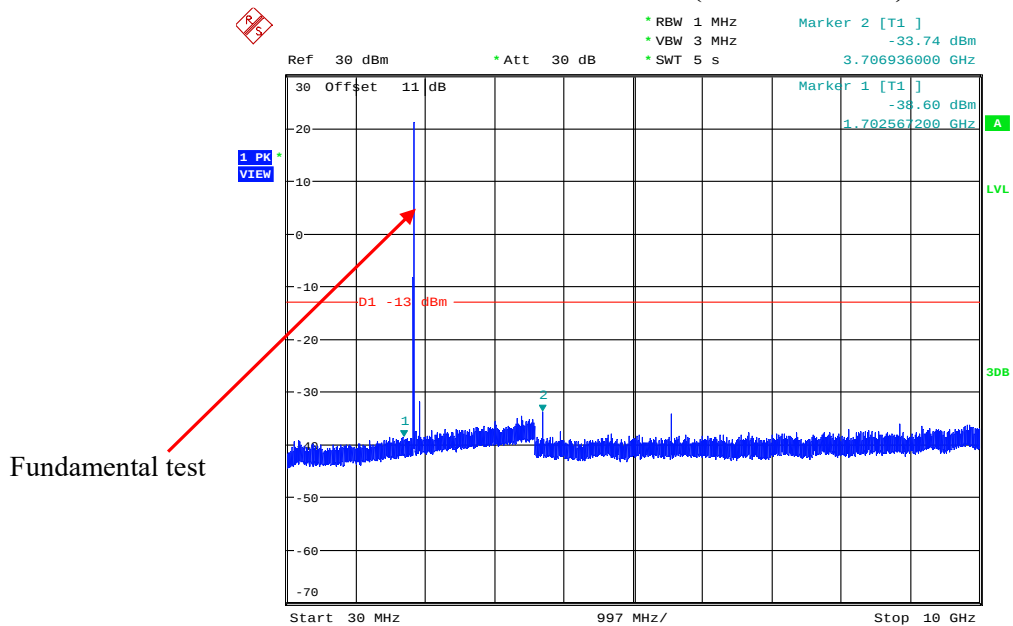
Date: 24.NOV.2022 16:06:25

High Channel:**30 MHz – 10GHz (GPRS Mode)**

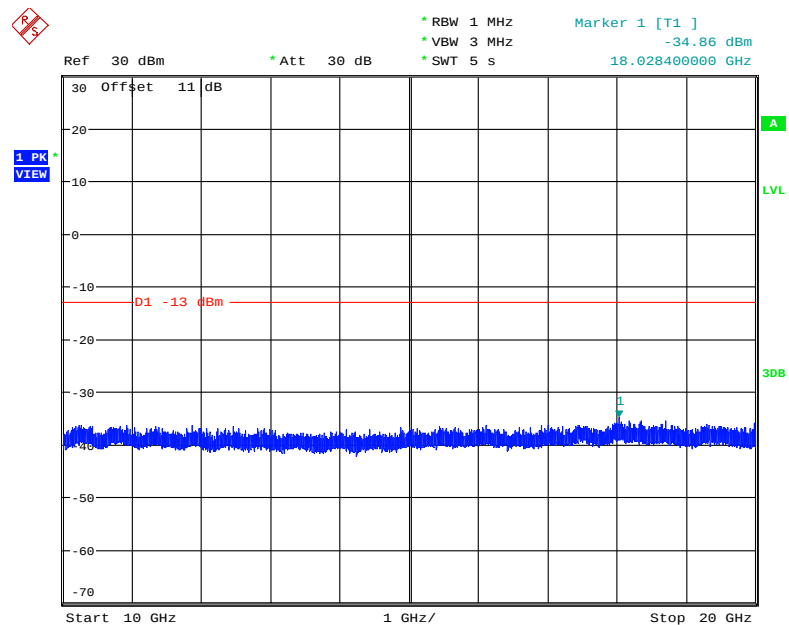
Date: 24.NOV.2022 16:12:04

10 GHz – 20GHz (GPRS Mode)

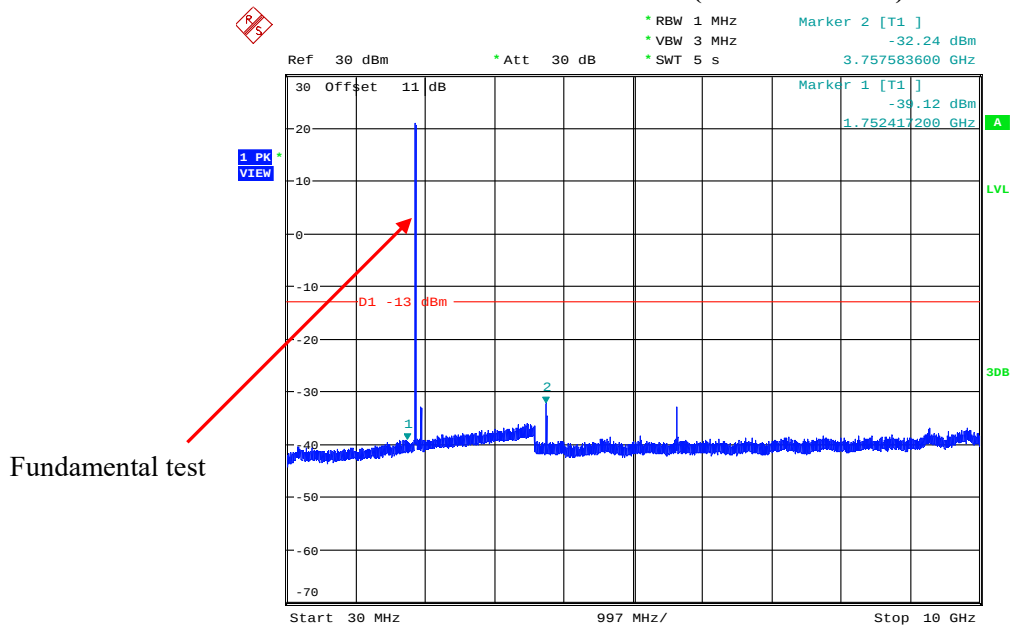
Date: 24.NOV.2022 16:12:39

Low Channel:**30 MHz – 10GHz (WCDMA Mode)**

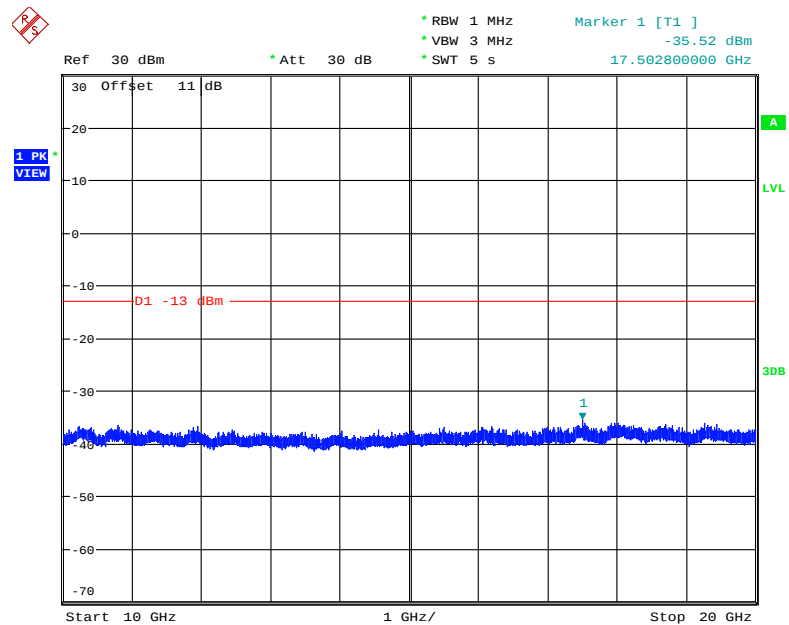
Date: 24.NOV.2022 15:17:49

10 GHz – 20GHz (WCDMA Mode)

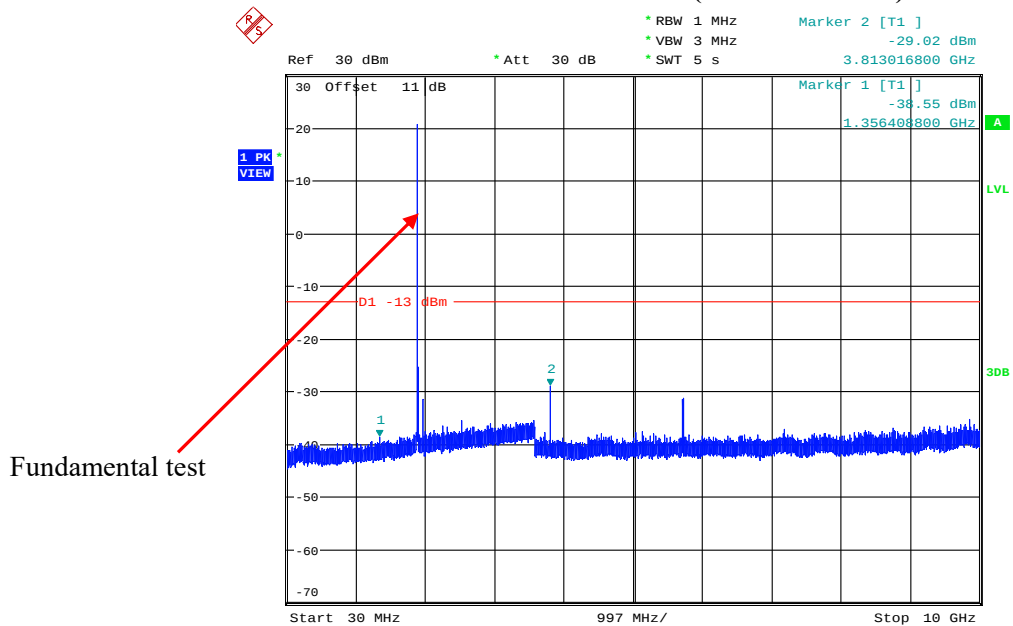
Date: 24.NOV.2022 15:18:14

Middle Channel:**30 MHz – 10GHz (WCDMA Mode)**

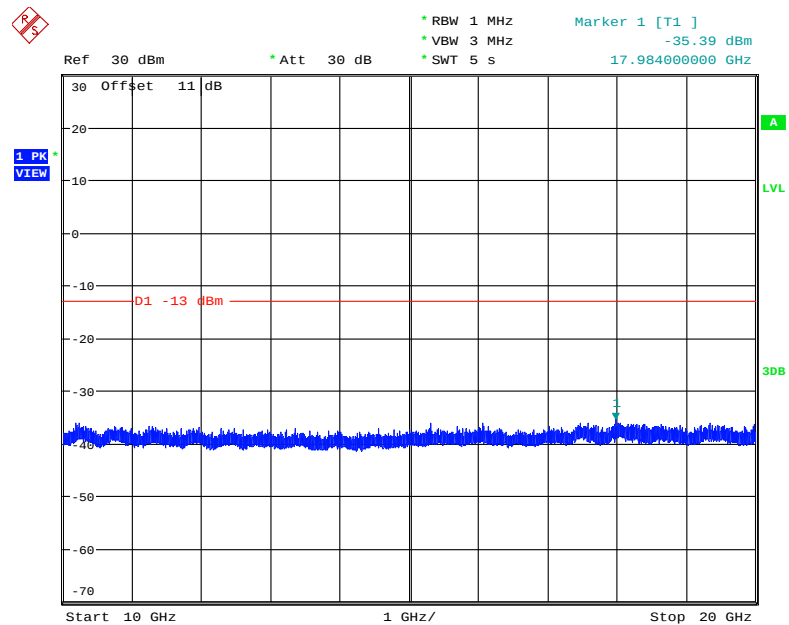
Date: 24.NOV.2022 15:19:40

10 GHz – 20GHz (WCDMA Mode)

Date: 24.NOV.2022 15:20:25

High Channel:**30 MHz – 10GHz (WCDMA Mode)**

Date: 24.NOV.2022 15:21:44

10 GHz – 20GHz (WCDMA Mode)

Date: 24.NOV.2022 15:22:19

The test plots of LTE band please refer to the Appendix B.

FCC § 2.1053; § 22.917 (a); § 24.238 (a); §27.53- SPURIOUS RADIATED EMISSIONS

Applicable Standard

FCC § 2.1053, §22.917(a)& § 24.238(a) & § 27.53.

Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the receiving antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to tenth harmonic of the fundamental frequency was investigated.

Test Data

Environmental Conditions

Temperature:	24.5℃
Relative Humidity:	54 %
ATM Pressure:	101.0kPa

The testing was performed by Jeff Jiang on 2022-09-23.

Test mode: Transmitting (Pre-scan in the X, Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

The worst case is as below:

30MHz-10GHz:**Cellular Band (Part 22H)**

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
GSM850								
Low Channel								
956.05	-70.02	56	1.2	H	10.0	-60.02	-13	47.02
956.05	-77.40	60	1.4	V	11.7	-65.70	-13	52.70
1648.4	-40.4	126	1.4	H	3.5	-36.9	-13	23.9
1648.4	-36.9	170	2.1	V	3.1	-33.8	-13	20.8
2472.6	-44.7	47	2.3	H	6.6	-38.1	-13	25.1
2472.6	-40.7	105	1.7	V	5.8	-34.9	-13	21.9
3296.8	-41.2	228	2.1	H	6.4	-34.8	-13	21.8
3296.8	-37.2	157	1.3	V	5.7	-31.5	-13	18.5
Middle Channel								
951.57	-72.81	348	2.0	H	10.0	-62.81	-13	49.81
951.57	-77.49	52	1.7	V	11.7	-65.79	-13	52.79
1673.2	-39.7	330	2.1	H	3.8	-35.9	-13	22.9
1673.2	-37.5	99	1.9	V	3.1	-34.4	-13	21.4
2509.8	-43.7	270	1.3	H	6.2	-37.5	-13	24.5
2509.8	-41.1	351	2.2	V	5.5	-35.6	-13	22.6
3346.4	-43.0	359	1.8	H	6.6	-36.4	-13	23.4
3346.4	-37.5	166	1.5	V	5.4	-32.1	-13	19.1
High Channel								
950.79	-71.87	49	1.0	H	10.0	-61.87	-13	48.87
950.79	-77.60	44	1.4	V	11.7	-65.90	-13	52.90
1697.6	-40.5	239	1.2	H	4.1	-36.4	-13	23.4
1697.6	-33.8	86	1.5	V	3.1	-30.7	-13	17.7
2546.4	-43.5	51	1.6	H	6.1	-37.4	-13	24.4
2546.4	-41.0	304	1.9	V	5.8	-35.2	-13	22.2
3395.2	-46.5	279	1.0	H	6.2	-40.3	-13	27.3
3395.2	-40.8	129	1.3	V	5.4	-35.4	-13	22.4

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
WCDMA Band 5								
Low Channel								
951.81	-71.12	272	1.7	H	10.0	-61.12	-13	48.12
951.81	-77.19	265	1.2	V	11.7	-65.49	-13	52.49
1652.8	-55.6	216	1.1	H	3.5	-52.1	-13	39.1
1652.8	-51.8	348	1.9	V	3.1	-48.7	-13	35.7
2479.2	-48.3	141	1.5	H	6.6	-41.7	-13	28.7
2479.2	-45.8	170	1.3	V	5.8	-40	-13	27.0
3305.6	-52.3	191	1.7	H	6.4	-45.9	-13	32.9
3305.6	-51.2	170	2.4	V	5.7	-45.5	-13	32.5
Middle Channel								
950.03	-70.96	37	2.4	H	10.0	-60.96	-13	47.96
950.03	-76.27	346	1.3	V	11.7	-64.57	-13	51.57
1672.8	-54.7	211	2.4	H	3.5	-51.2	-13	38.2
1672.8	-50.9	288	1.2	V	3.1	-47.8	-13	34.8
2509.2	-56.6	121	2.3	H	6.6	-50.0	-13	37.0
2509.2	-55.0	5	2.2	V	5.8	-49.2	-13	36.2
3345.6	-52.0	102	1.8	H	6.4	-45.6	-13	32.6
3345.6	-50.8	319	2.0	V	5.7	-45.1	-13	32.1
High Channel								
952.90	-70.82	51	2.1	H	10.0	-60.82	-13	47.82
952.90	-75.40	32	2.2	V	11.7	-63.70	-13	50.70
1693.2	-56.4	97	2.1	H	4.1	-52.3	-13	39.3
1693.2	-51.9	320	2.1	V	3.1	-48.8	-13	35.8
2539.8	-56.2	285	2.3	H	6.1	-50.1	-13	37.1
2539.8	-54.8	248	1.6	V	5.8	-49.0	-13	36.0
3386.4	-52.5	186	1.4	H	6.2	-46.3	-13	33.3
3386.4	-51.0	259	2.0	V	5.4	-45.6	-13	32.6

30MHz-20GHz:**PCS Band (Part 24E)**

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
GSM 1900								
Low Channel								
950.80	-72.83	281	2.5	H	10.0	-62.83	-13	49.83
950.80	-76.50	147	1.9	V	11.7	-64.80	-13	51.80
3700.4	-49.8	5	2.1	H	8.1	-41.7	-13	28.7
3700.4	-47.5	101	2.3	V	7.6	-39.9	-13	26.9
5550.6	-53.3	148	1.9	H	9.6	-43.7	-13	30.7
5550.6	-52.1	70	2.1	V	9.1	-43	-13	30.0
Middle Channel								
950.28	-71.39	359	2.4	H	10.0	-61.39	-13	48.39
950.28	-75.69	341	1.6	V	11.7	-63.99	-13	50.99
3760	-50.4	294	1.6	H	8.8	-41.6	-13	28.6
3760	-47.1	173	1.6	V	8	-39.1	-13	26.1
5640	-54.8	159	1.8	H	10.2	-44.6	-13	31.6
5640	-53.5	19	1.2	V	9.5	-44	-13	31.0
High Channel								
950.93	-72.55	324	1.4	H	10.0	-62.55	-13	49.55
950.93	-77.11	30	2.0	V	11.7	-65.41	-13	52.41
3819.6	-51.0	247	1.4	H	8.7	-42.3	-13	29.3
3819.6	-46.1	295	1.7	V	8	-38.1	-13	25.1
5729.4	-56.1	190	1.6	H	10.8	-45.3	-13	32.3
5729.4	-54.9	65	1.1	V	10.4	-44.5	-13	31.5

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
WCDMA Band 2								
Low Channel								
953.99	-72.36	351	1.3	H	10.0	-62.36	-13	49.36
953.99	-76.83	148	2.3	V	11.7	-65.13	-13	52.13
3704.8	-54.2	192	1.3	H	8.1	-46.1	-13	33.1
3704.8	-51.0	159	1.6	V	7.6	-43.4	-13	30.4
5557.2	-53.5	53	2.2	H	9.6	-43.9	-13	30.9
5557.2	-52.5	207	2.0	V	9.1	-43.4	-13	30.4
Middle Channel								
956.01	-72.77	61	2.5	H	10.0	-62.77	-13	49.77
956.01	-75.34	149	1.9	V	11.7	-63.64	-13	50.64
3760	-55.0	317	1.8	H	8.8	-46.2	-13	33.2
3760	-51.2	305	1.9	V	8	-43.2	-13	30.2
5640	-55.0	232	1.3	H	10.2	-44.8	-13	31.8
5640	-53.8	312	1.2	V	9.5	-44.3	-13	31.3
High Channel								
955.75	-72.54	356	1.5	H	10.0	-62.54	-13	49.54
955.75	-75.79	324	2.0	V	11.7	-64.09	-13	51.09
3815.2	-54.2	29	1.4	H	8.7	-45.5	-13	32.5
3815.2	-50.3	326	2.5	V	8	-42.3	-13	29.3
5722.8	-55.2	160	2.0	H	10.4	-44.8	-13	31.8
5722.8	-53.8	318	2.2	V	9.9	-43.9	-13	30.9

LTE Band: (Pre-scan with all the bandwidth and modulation, and worst case as below)

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 2								
Test frequency range: 30MHz-20GHz								
QPSK, 1.4MHz bandwidth, Low Channel								
956.75	-71.43	147	2.4	H	10.0	-61.43	-13	48.43
956.75	-74.92	283	1.5	V	11.7	-63.22	-13	50.22
3701.4	-53.6	344	1.1	H	8.1	-45.5	-13	32.5
3701.4	-47.5	298	1.2	V	7.6	-39.9	-13	26.9
5552.1	-52.2	93	2.4	H	9.6	-42.6	-13	29.6
5552.1	-50.6	317	2.0	V	9.1	-41.5	-13	28.5
QPSK, 1.4MHz bandwidth, Middle Channel								
955.56	-71.98	153	2.1	H	10.0	-61.98	-13	48.98
955.56	-77.06	91	1.4	V	11.7	-65.36	-13	52.36
3760	-53.1	80	1.5	H	8.8	-44.3	-13	31.3
3760	-46.5	222	2.2	V	8	-38.5	-13	25.5
5640	-54.7	324	1.1	H	10.2	-44.5	-13	31.5
5640	-53.2	167	1.1	V	9.5	-43.7	-13	30.7
QPSK, 1.4MHz bandwidth, High Channel								
956.29	-70.44	110	2.2	H	10.0	-60.44	-13	47.44
956.29	-76.61	102	2.0	V	11.7	-64.91	-13	51.91
3818.6	-53.5	17	1.4	H	8.7	-44.8	-13	31.8
3818.6	-48.0	107	2.0	V	8	-40	-13	27.0
5727.9	-54.1	42	2.1	H	10.6	-43.5	-13	30.5
5727.9	-51.9	99	1.5	V	10.2	-41.7	-13	28.7

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 4								
Test frequency range: 30MHz-20GHz								
QPSK, 1.4MHz bandwidth, Low Channel								
951.74	-70.88	8	2.3	H	10.0	-60.88	-13	47.88
951.74	-74.96	162	1.6	V	11.7	-63.26	-13	50.26
3421.4	-48.6	325	2.2	H	6.4	-42.2	-13	29.2
3421.4	-45.5	184	2.2	V	5.7	-39.8	-13	26.8
5132.1	-55.9	318	1.8	H	11.3	-44.6	-13	31.6
5132.1	-54.8	98	2.0	V	10.8	-44	-13	31.0
QPSK, 1.4MHz bandwidth, Middle Channel								
950.59	-72.12	25	1.4	H	10.0	-62.12	-13	49.12
950.59	-75.95	175	2.3	V	11.7	-64.25	-13	51.25
3465	-50.7	316	1.4	H	7	-43.7	-13	30.7
3465	-50.2	173	1.3	V	6.2	-44	-13	31.0
5197.5	-54.8	110	2.2	H	10.4	-44.4	-13	31.4
5197.5	-53.2	126	1.2	V	9.8	-43.4	-13	30.4
QPSK, 1.4MHz bandwidth, High Channel								
950.26	-70.43	177	2.1	H	10.0	-60.43	-13	47.43
950.26	-75.53	223	2.0	V	11.7	-63.83	-13	50.83
3508.6	-51.4	133	1.2	H	7.8	-43.6	-13	30.6
3508.6	-48.1	84	1.8	V	6.6	-41.5	-13	28.5
5262.9	-53.8	93	1.6	H	9.5	-44.3	-13	31.3
5262.9	-52.0	13	2.0	V	8.9	-43.1	-13	30.1

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 5								
Test frequency range: 30MHz-10GHz								
QPSK, 1.4MHz bandwidth, Low Channel								
955.65	-71.16	250	2.5	H	10.0	-61.16	-13	48.16
955.65	-75.73	353	1.7	V	11.7	-64.03	-13	51.03
1649.4	-56.0	73	2.3	H	3.5	-52.5	-13	39.5
1649.4	-51.8	340	1.7	V	3.1	-48.7	-13	35.7
2474.1	-47.7	263	2.1	H	6.6	-41.1	-13	28.1
2474.1	-45.9	54	1.4	V	5.8	-40.1	-13	27.1
3298.8	-51.7	37	1.9	H	6.4	-45.3	-13	32.3
3298.8	-50.6	99	2.4	V	5.7	-44.9	-13	31.9
QPSK, 1.4MHz bandwidth, Middle Channel								
952.12	-72.40	93	1.9	H	10.0	-62.40	-13	49.40
952.12	-76.26	163	1.2	V	11.7	-64.56	-13	51.56
1673	-53.9	17	1.4	H	3.8	-50.1	-13	37.1
1673	-49.2	339	2.1	V	3.1	-46.1	-13	33.1
2509.5	-55.7	204	1.4	H	6.2	-49.5	-13	36.5
2509.5	-54.1	49	1.4	V	5.5	-48.6	-13	35.6
3346	-52.4	308	1.5	H	6.6	-45.8	-13	32.8
3346	-50.7	82	1.1	V	5.4	-45.3	-13	32.3
QPSK, 1.4MHz bandwidth, High Channel								
950.99	-71.23	221	1.7	H	10.0	-61.23	-13	48.23
950.99	-75.85	337	2.3	V	11.7	-64.15	-13	51.15
1696.6	-52.5	2	1.3	H	4.1	-48.4	-13	35.4
1696.6	-48.1	213	2.3	V	3.1	-45	-13	32.0
2544.9	-55.4	88	1.8	H	6.1	-49.3	-13	36.3
2544.9	-54.2	61	2.1	V	5.8	-48.4	-13	35.4
3393.2	-51.7	210	1.8	H	6.2	-45.5	-13	32.5
3393.2	-50.2	319	1.8	V	5.4	-44.8	-13	31.8

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 7								
Test frequency range: 30MHz-26.5GHz								
QPSK, 5MHz bandwidth, Low Channel								
955.38	-70.83	279	2.3	H	10.0	-60.83	-25	35.83
955.38	-75.39	144	2.5	V	11.7	-63.69	-25	38.69
5005	-51.2	304	1.5	H	10.8	-40.4	-25	15.4
5005	-47.3	84	2.3	V	10.2	-37.1	-25	12.1
7507.5	-62.7	359	2.1	H	20.3	-42.4	-25	17.4
7507.5	-61.6	99	1.5	V	20.1	-41.5	-25	16.5
QPSK, 5MHz bandwidth, Middle Channel								
951.04	-70.94	1	1.6	H	9.8	-61.14	-25	36.14
951.04	-75.68	318	2.0	V	11.7	-63.98	-25	38.98
5070	-49.4	235	1.3	H	11.1	-38.3	-25	13.3
5070	-46.9	308	2.5	V	10.8	-36.1	-25	11.1
7605	-65.8	323	1.8	H	21.2	-44.6	-25	19.6
7605	-64.1	202	1.0	V	20.1	-44	-25	19.0
QPSK, 5MHz bandwidth, High Channel								
956.76	-70.50	312	1.5	H	10.0	-60.50	-25	35.50
956.76	-74.91	217	2.0	V	11.7	-63.21	-25	38.21
5135	-42.9	276	1.8	H	11.3	-31.6	-25	6.6
5135	-41.3	70	1.1	V	10.8	-30.5	-25	5.5
7702.5	-66.2	344	1.1	H	21.2	-45	-25	20.0
7702.5	-65.4	358	1.3	V	21	-44.4	-25	19.4

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 12								
Test frequency range: 30MHz-10GHz								
QPSK, 1.4MHz bandwidth, Low Channel								
954.97	-71.32	43	2.4	H	10.0	-61.32	-13	48.32
954.97	-76.67	277	2.5	V	11.7	-64.97	-13	51.97
1399.4	-58.5	305	1.4	H	6.3	-52.2	-13	39.2
1399.4	-56.4	162	1.1	V	5.7	-50.7	-13	37.7
2099.1	-51.7	129	1.9	H	4.9	-46.8	-13	33.8
2099.1	-51.1	301	1.4	V	3.9	-47.2	-13	34.2
2798.8	-55.3	189	2.3	H	6.6	-48.7	-13	35.7
2798.8	-53.9	43	2.1	V	6	-47.9	-13	34.9
QPSK, 1.4MHz bandwidth, Middle Channel								
953.54	-71.44	290	1.1	H	10.0	-61.44	-13	48.44
953.54	-77.57	153	1.3	V	11.7	-65.87	-13	52.87
1415	-58.1	347	1.4	H	5.9	-52.2	-13	39.2
1415	-57.6	266	1.4	V	5.9	-51.7	-13	38.7
2122.5	-53.4	35	1.5	H	6.3	-47.1	-13	34.1
2122.5	-52.0	226	2.1	V	5.1	-46.9	-13	33.9
2830	-55.0	300	1.4	H	6.7	-48.3	-13	35.3
2830	-54.4	311	1.1	V	6.7	-47.7	-13	34.7
QPSK, 1.4MHz bandwidth, High Channel								
952.85	-70.77	42	1.7	H	10.0	-60.77	-13	47.77
952.85	-76.34	331	1.4	V	11.7	-64.64	-13	51.64
1430.6	-58.7	293	2.5	H	5.9	-52.8	-13	39.8
1430.6	-58.6	141	1.4	V	5.9	-52.7	-13	39.7
2145.9	-53.8	117	1.5	H	6.3	-47.5	-13	34.5
2145.9	-53.2	24	1.0	V	5.1	-48.1	-13	35.1
2861.2	-56.5	165	1.8	H	6.7	-49.8	-13	36.8
2861.2	-56.1	299	1.2	V	6.7	-49.4	-13	36.4

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 13								
Test frequency range: 30MHz-10GHz								
QPSK, 5MHz, Low Channel								
951.43	-60.06	345	2.4	H	-0.2	-60.26	-13	47.26
951.43	-67.64	10	2.3	V	3.1	-64.54	-13	51.54
1559	-57.9	276	1.4	H	4.2	-53.7	-40	13.7
1559	-50.7	134	1.6	V	3.3	-47.4	-40	7.4
2338.5	-60.7	101	1.8	H	7.3	-53.4	-13	40.4
2338.5	-59.5	152	1.3	V	6.5	-53	-13	40.0
3118	-57.9	211	1.4	H	7.3	-50.6	-13	37.6
3118	-56.5	317	1.7	V	6.5	-50	-13	37.0
QPSK, 5MHz bandwidth, Middle Channel								
951.75	-71.65	315	1.9	H	10.0	-61.65	-13	48.65
951.75	-75.01	295	1.5	V	11.7	-63.31	-13	50.31
1564	-52.3	298	1.3	H	4.2	-48.1	-40	8.1
1564	-44.3	119	1.7	V	3.3	-41	-40	1.0
2346	-58.5	235	1.6	H	7.3	-51.2	-13	38.2
2346	-57.4	322	1.3	V	6.4	-51	-13	38.0
3128	-56.6	358	1.3	H	7.3	-49.3	-13	36.3
3128	-55.6	28	2.4	V	6.6	-49	-13	36.0
QPSK, 5MHz bandwidth, High Channel								
952.92	-72.29	283	1.9	H	10.0	-62.29	-13	49.29
952.92	-77.59	135	1.2	V	11.7	-65.89	-13	52.89
1569	-52.8	331	2.3	H	4.2	-48.6	-40	8.6
1569	-49.6	176	2.0	V	3.3	-46.3	-40	6.3
2353.5	-60.6	121	1.2	H	7.3	-53.3	-13	40.3
2353.5	-58.3	323	1.5	V	6.4	-51.9	-13	38.9
3138	-57.3	144	1.2	H	7.4	-49.9	-13	36.9
3138	-55.8	216	1.6	V	6.6	-49.2	-13	36.2

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 66								
Test frequency range: 30MHz-20GHz								
QPSK, 1.4MHz bandwidth, Low Channel								
956.94	-71.61	13	1.5	H	10.0	-61.61	-13	48.61
956.94	-75.16	194	2.5	V	11.7	-63.46	-13	50.46
3421.4	-49.2	118	1.8	H	6.4	-42.8	-13	29.8
3421.4	-45.8	144	2.1	V	5.7	-40.1	-13	27.1
5132.1	-55.9	84	1.3	H	11.7	-44.2	-13	31.2
5132.1	-54.6	90	1.5	V	10.8	-43.8	-13	30.8
QPSK, 1.4MHz bandwidth, Middle Channel								
952.81	-72.25	118	2.0	H	10.0	-62.25	-13	49.25
952.81	-76.94	16	1.6	V	11.7	-65.24	-13	52.24
3490	-50.8	70	1.5	H	7.6	-43.2	-13	30.2
3490	-48.3	199	1.1	V	6.4	-41.9	-13	28.9
5235	-53.1	230	1.7	H	9.7	-43.4	-13	30.4
5235	-51.5	231	1.5	V	9.2	-42.3	-13	29.3
QPSK, 1.4MHz bandwidth, High Channel								
954.16	-72.12	235	2.4	H	10.0	-62.12	-13	49.12
954.16	-77.55	40	2.4	V	11.7	-65.85	-13	52.85
3558.6	-51.8	81	1.6	H	7.8	-44	-13	31.0
3558.6	-49.7	281	1.5	V	7	-42.7	-13	29.7
5337.9	-52.7	167	1.4	H	9.4	-43.3	-13	30.3
5337.9	-50.9	233	1.7	V	8.7	-42.2	-13	29.2

Note:

Absolute Level = Reading Level + Substituted Factor

Substituted Factor contains: SG Level - Cable loss+ Antenna Gain

Margin = Limit -Absolute Level

FCC§ 22.917 (a);§ 24.238 (a); §27.53(c) (g)(h)(m) - BAND EDGES**Applicable Standard**

According to § 22.917(a), the power of any emissions 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.

According to §24.238(a), the power of any emissions 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.

According to FCC §27.53 (c), For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

- (1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;
- (2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;
- (3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $76 + 10 \log(P)$ dB in a 6.25 kHz band segment, for base and fixed stations;
- (4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log(P)$ dB in a 6.25 kHz band segment, for mobile and portable stations;

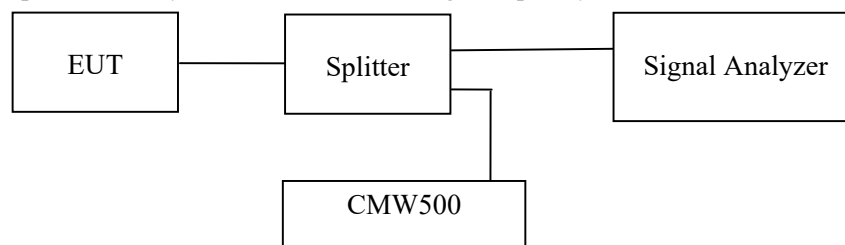
According to FCC §27.53 (g)(h), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

According to FCC §27.53 (m), the attenuation factor shall be not less than $40 + 10 \log(P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log(P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log(P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in [paragraph \(m\)\(6\)](#) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log(P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log(P)$ dB at or below 2490.5 MHz.

Test Procedure

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

The center of the spectrum analyzer was set to block edge frequency



Note: the worst path loss (cable loss and splitter inset loss) among the test frequency range has added into plot.

Test Data**Environmental Conditions**

Temperature:	25.7℃
Relative Humidity:	58.2%
ATM Pressure:	101.0 kPa

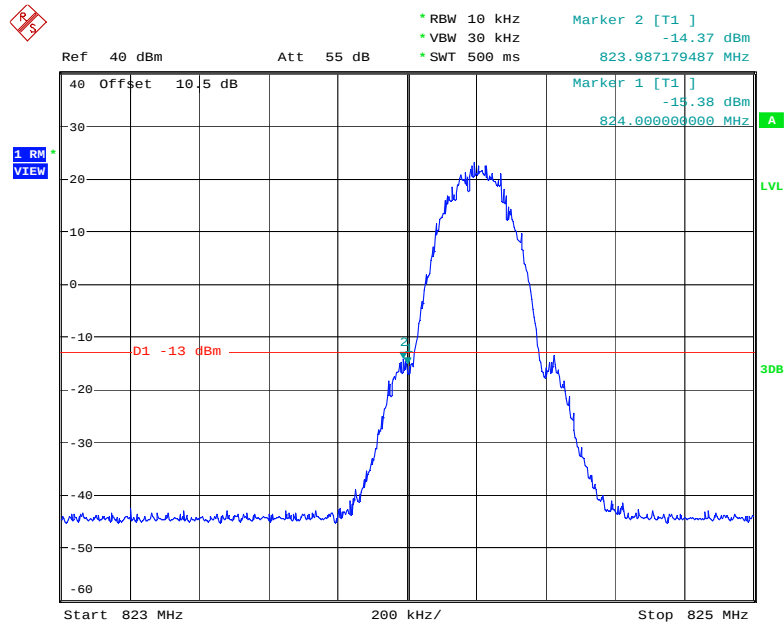
The testing was performed by Cat Kang from 2022-10-18 to 2023-01-09.

EUT operation mode: Transmitting (Worst case)

Test Result: Pass

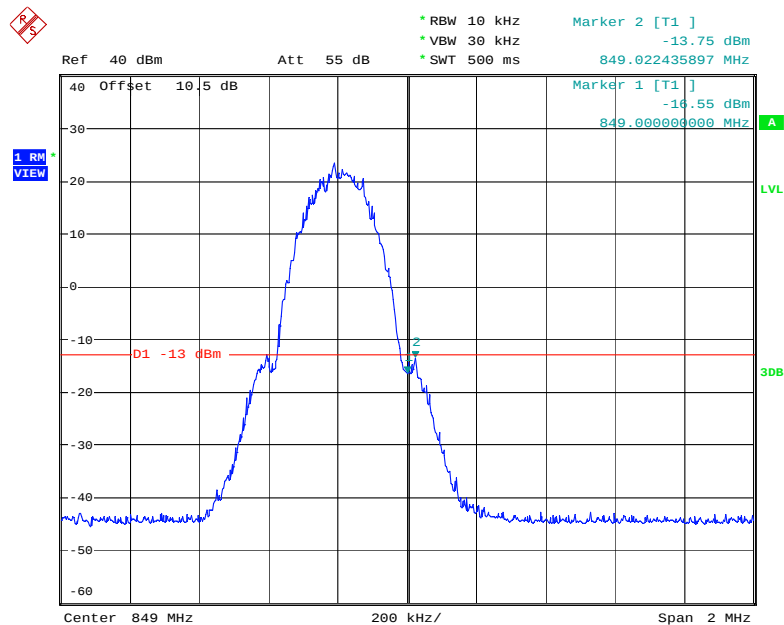
Please refer to the following plots.

Cellular Band, Left Band Edge for GPRS (GMSK) Mode



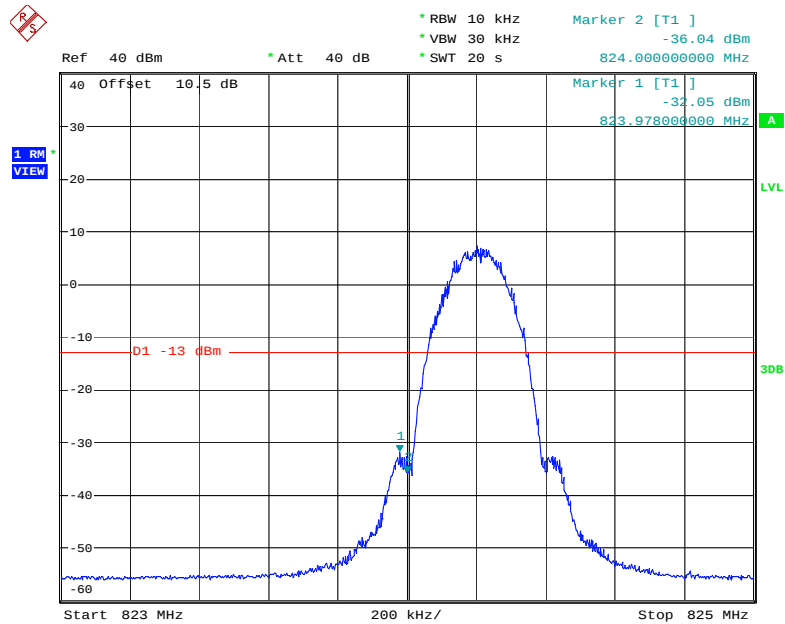
Date: 20.OCT.2022 11:18:08

Cellular Band, Right Band Edge for GPRS (GMSK) Mode



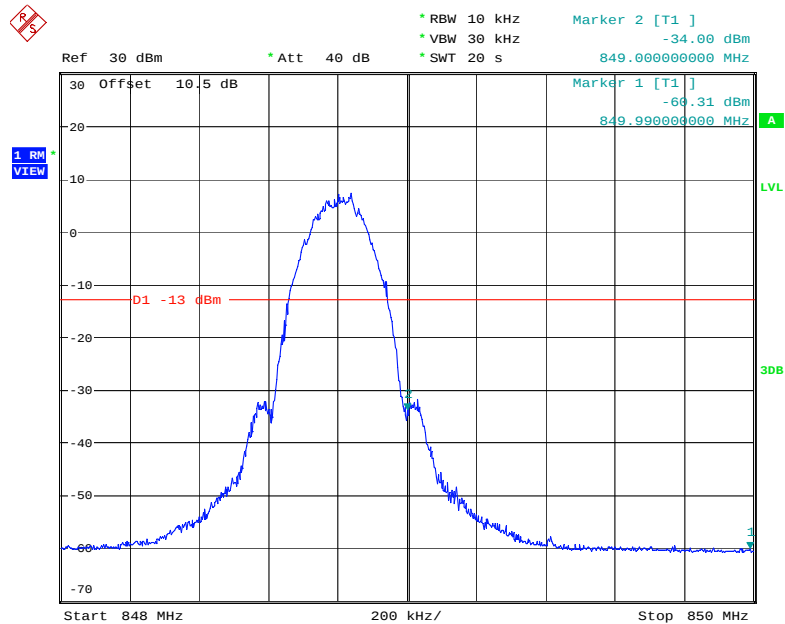
Date: 20.OCT.2022 11:16:15

Cellular Band, Left Band Edge for EGPRS (8PSK) Mode



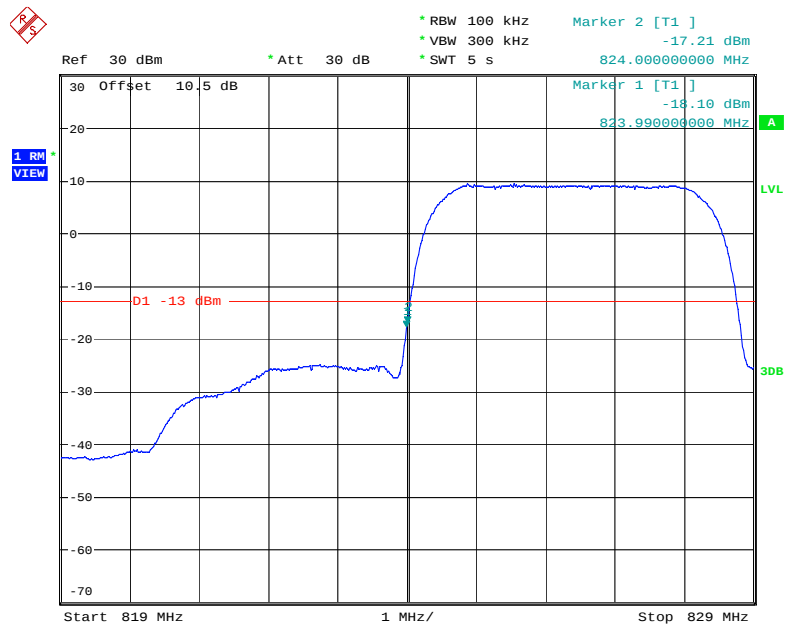
Date: 20.OCT.2022 08:53:34

Cellular Band, Right Band Edge for EGPRS (8PSK) Mode



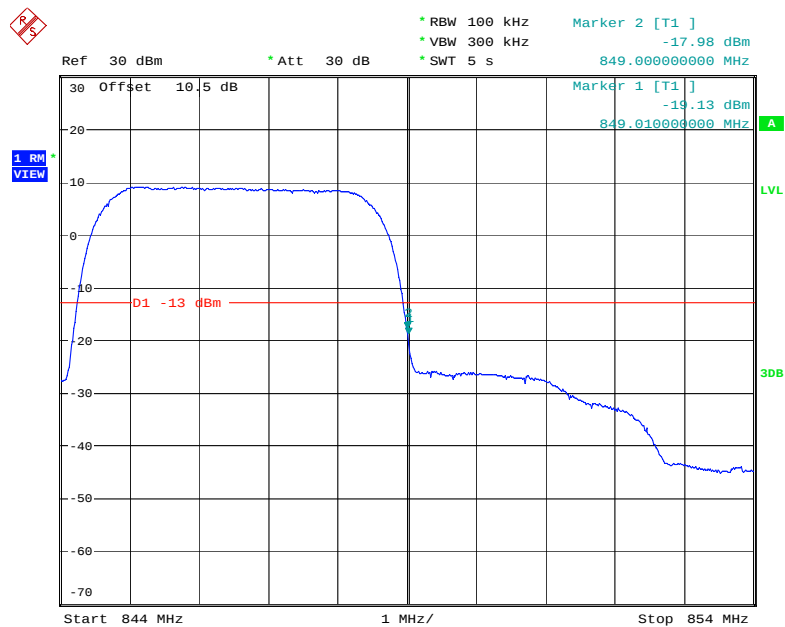
Date: 20.OCT.2022 09:01:40

Cellular Band, Left Band Edge for RMC (BPSK) Mode



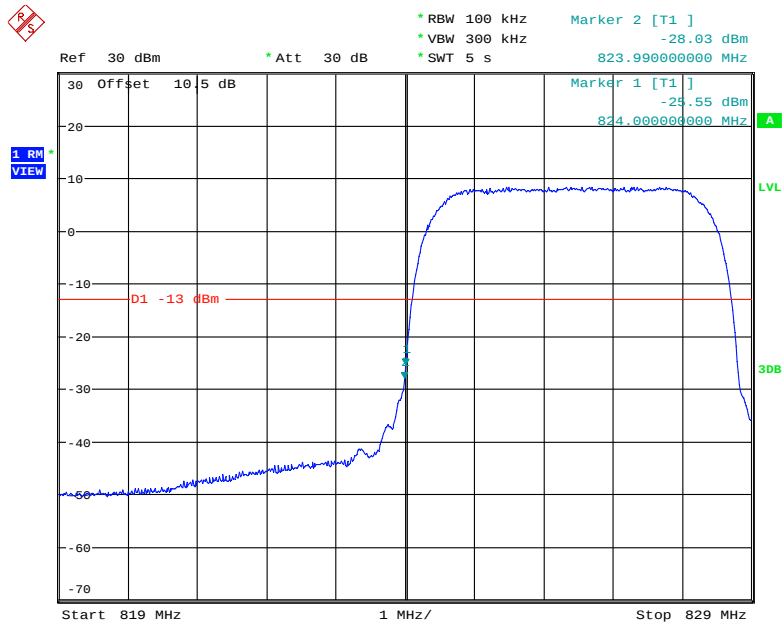
Date: 18.OCT.2022 19:04:35

Cellular Band, Right Band Edge for RMC (BPSK) Mode



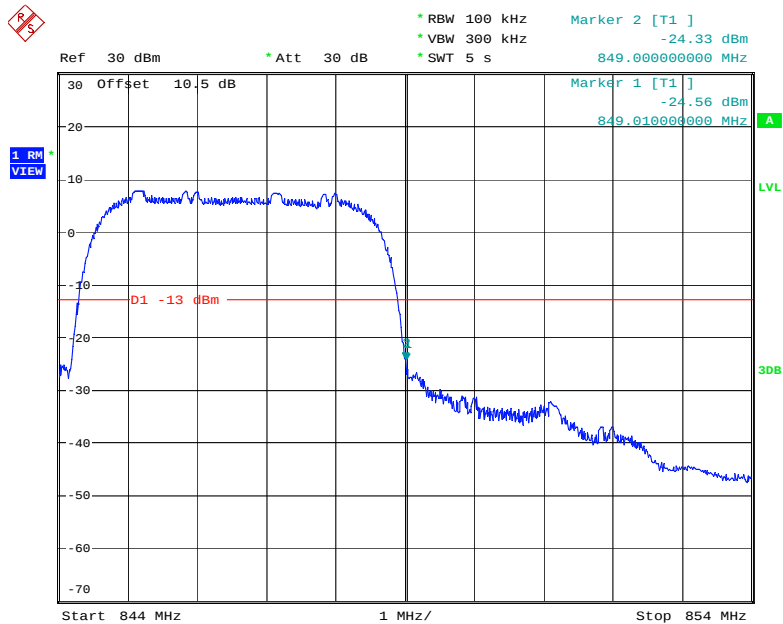
Date: 18.OCT.2022 19:11:39

Cellular Band, Left Band Edge for HSDPA(16QAM) Mode



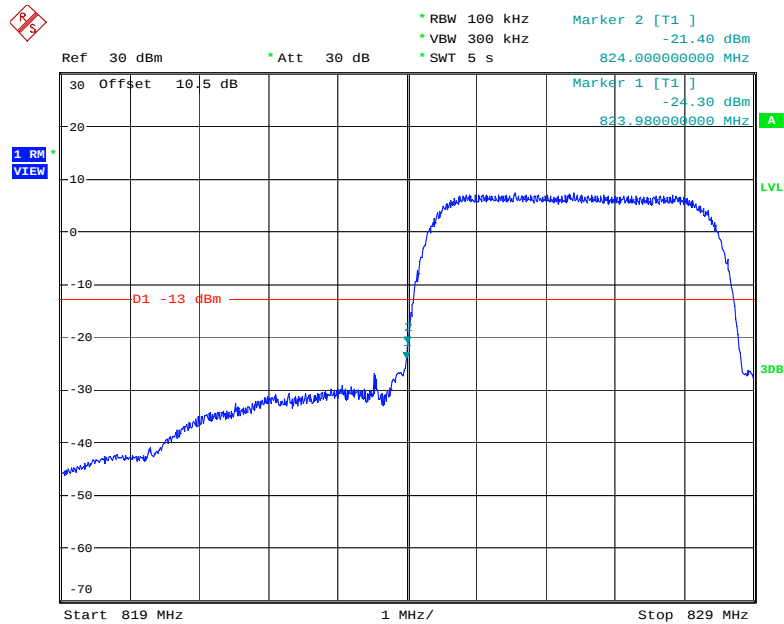
Date: 24.NOV.2022 15:37:44

Cellular Band, Right Band Edge for HSDPA (16QAM) Mode



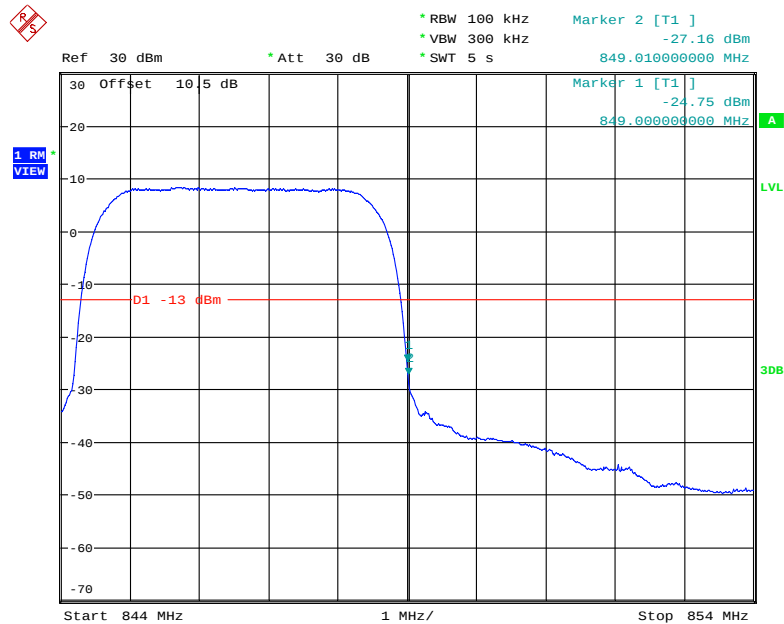
Date: 18.OCT.2022 19:15:29

Cellular Band, Left Band Edge for HSUPA (BPSK) Mode



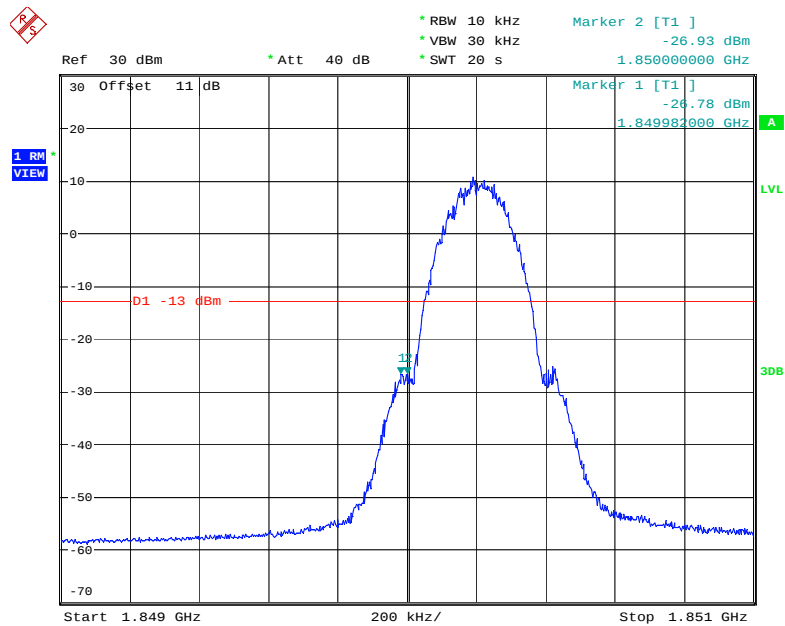
Date: 18.OCT.2022 19:59:17

Cellular Band, Right Band Edge for HSUPA (BPSK) Mode



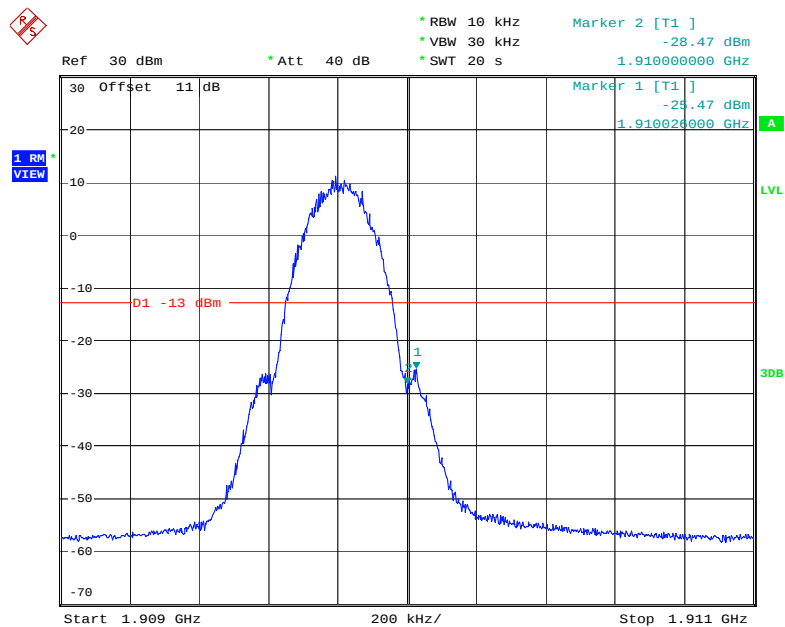
Date: 24.NOV.2022 15:28:31

PCS Band, Left Band Edge for GPRS (GMSK) Mode



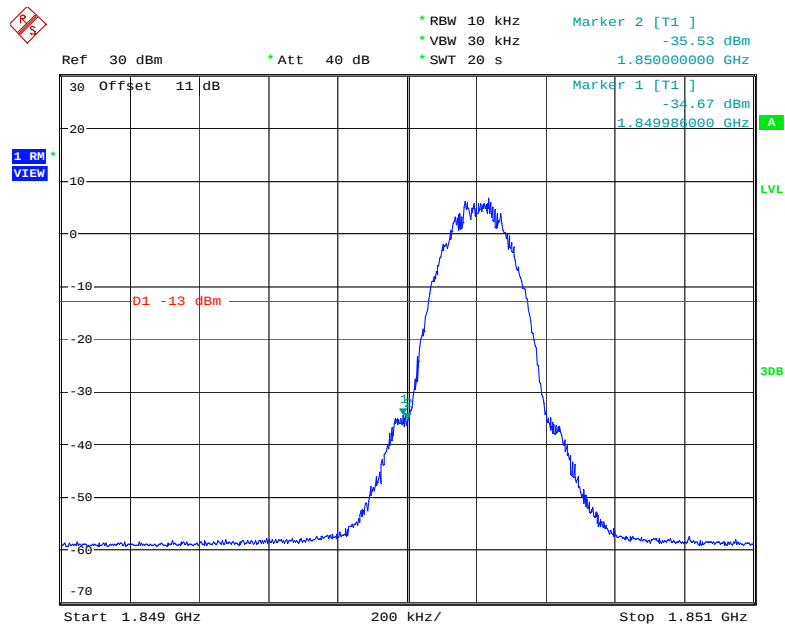
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PCS Band, Right Band Edge for GPRS (GMSK) Mode



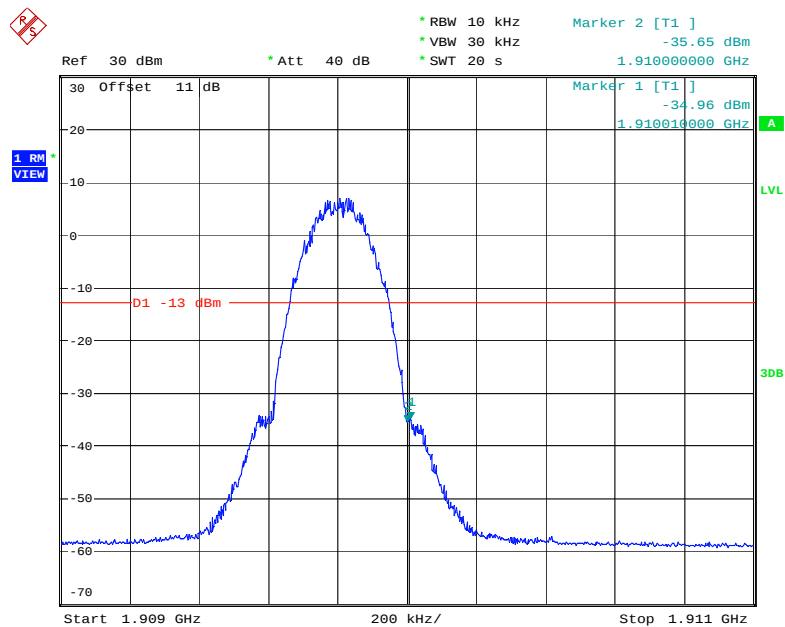
Date: 20.OCT.2022 11:41:44

PCS Band, Left Band Edge for EGPRS (8PSK) Mode

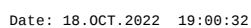
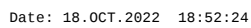


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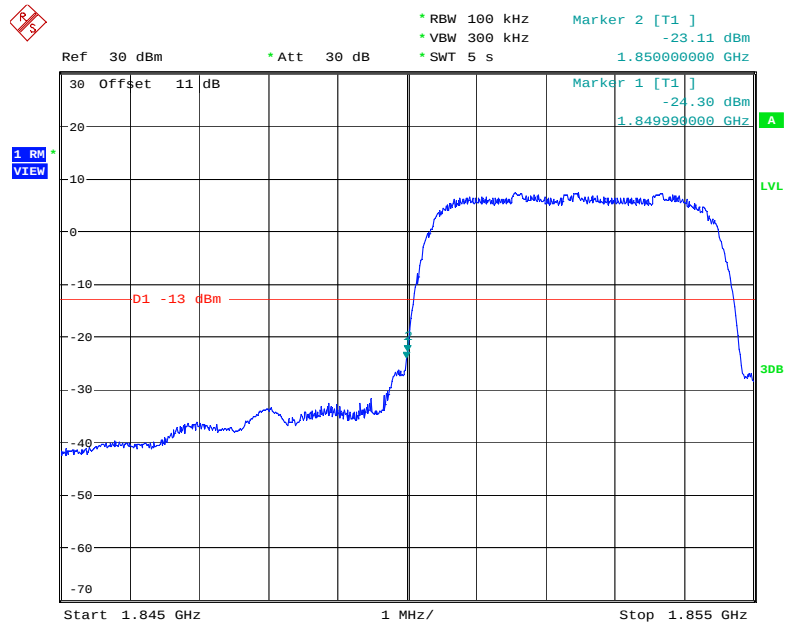
PCS Band, Right Band Edge for EGPRS (8PSK) Mode



Date: 19.OCT.2022 19:32:15

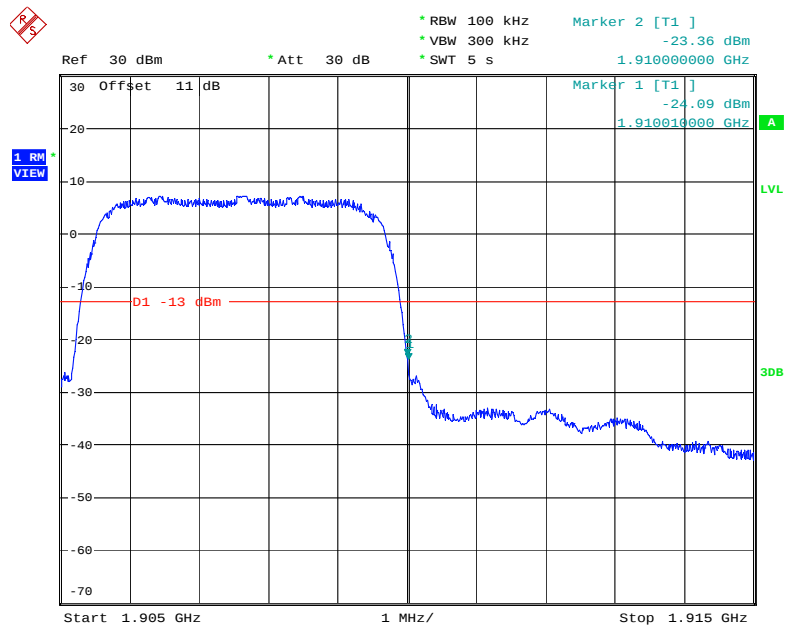


PCS Band, Left Band Edge for HSDPA(16QAM) Mode



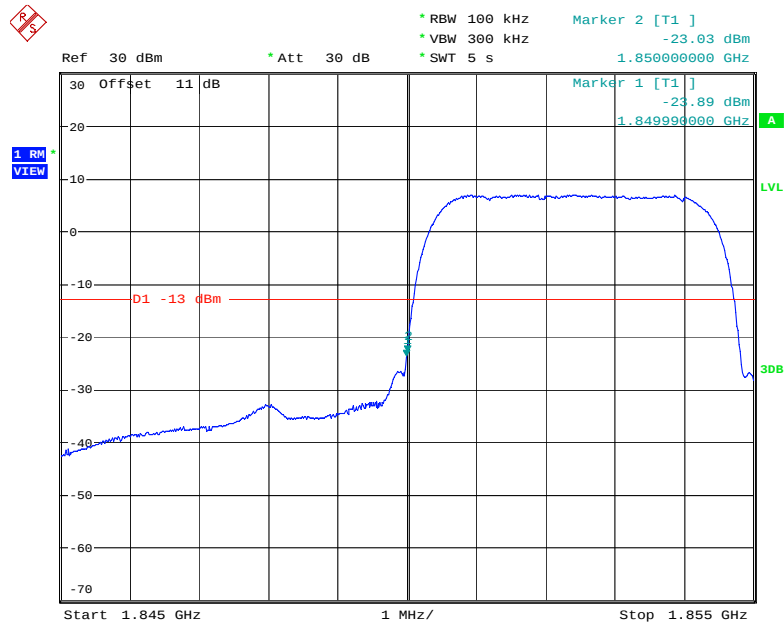
Date: 18.OCT.2022 19:35:38

PCS Band, Right Band Edge for HSDPA (16QAM) Mode



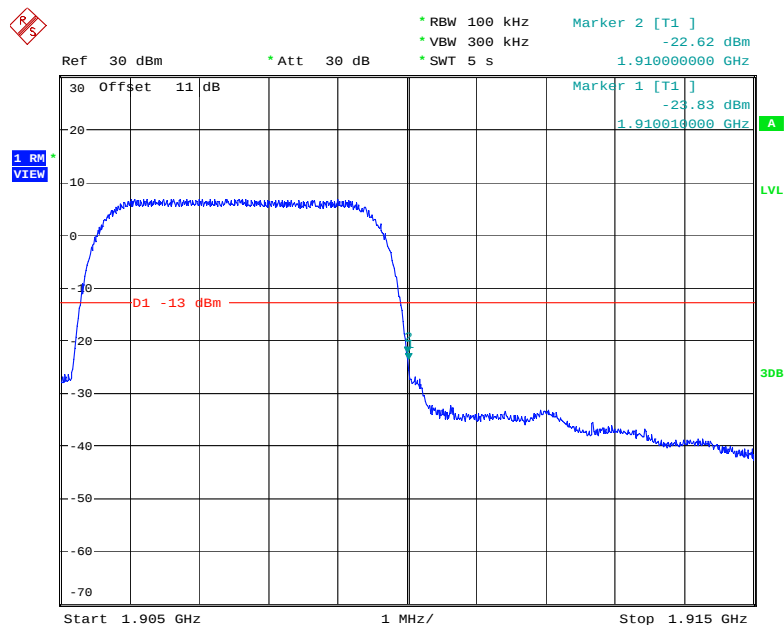
Date: 18.OCT.2022 19:28:09

PCS Band, Left Band Edge for HSUPA (QPSK) Mode



Date: 18.OCT.2022 19:46:04

PCS Band, Right Band Edge for HSUPA (QPSK) Mode



Date: 18.OCT.2022 19:54:32

The test plots of LTE bands please refer to the Appendix C.

FCC § 2.1055; § 22.355; § 24.235; §27.54 - FREQUENCY STABILITY

Applicable Standard

FCC § 2.1055, §22.355, §24.235&§27.54.

According to FCC §2.1055, the frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

According to §22.355, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table below:

Frequency Tolerance for Transmitters in the Public Mobile Services

Frequency Range (MHz)	Base, fixed (ppm)	Mobile ≤ 3 watts (ppm)	Mobile > 3 watts (ppm)
25 to 50	20.0	20.0	50.0
50 to 450	5.0	5.0	50.0
450 to 512	2.5	5.0	5.0
821 to 896	1.5	2.5	2.5
928 to 929.	5.0	N/A	N/A
929 to 960.	1.5	N/A	N/A
2110 to 2220	10.0	N/A	N/A

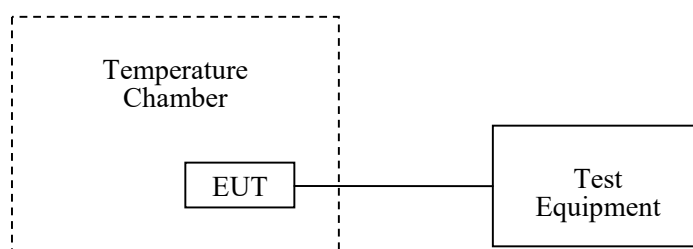
According to §24.235&§27.54, the frequency stability shall be sufficient to ensure that the fundamental emissions stays within the authorized frequency block.

Test Procedure

Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and the RF output was connected to communication test set via feed-through attenuators. The EUT was placed inside the temperature chamber. The DC leads and RF output cable exited the chamber through an opening made for the purpose.

After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from the communication test set.

Frequency Stability vs. Voltage: For hand carried, battery powered equipment; reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.



Test Data**Environmental Conditions**

Temperature:	25.7°C
Relative Humidity:	58.2%
ATM Pressure:	101.0 kPa

The testing was performed by Cat Kang from 2022-09-18 to 2202-10-21.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the following tables.

Cellular Band (Part 22H)**GPRS Mode**

Middle Channel, $f_0=836.6\text{MHz}$				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	N.V.	-7	-0.0084	2.5
-20		-11	-0.0131	2.5
-10		-10	-0.0120	2.5
0		-13	-0.0155	2.5
10		-8	-0.0096	2.5
20		-30	-0.0359	2.5
30		-21	-0.0251	2.5
40		-8	-0.0096	2.5
50		-15	-0.0179	2.5
20	L.V.	-17	-0.0203	2.5
	H.V.	-19	-0.0227	2.5

EDGE Mode

Middle Channel, $f_0 = 836.6\text{MHz}$				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	N.V.	3	0.0036	2.5
-20		1	0.0012	2.5
-10		5	0.0060	2.5
0		2	0.0024	2.5
10		5	0.0060	2.5
20		2	0.0024	2.5
30		4	0.0048	2.5
40		6	0.0072	2.5
50		8	0.0096	2.5
20	L.V.	4	0.0048	2.5
	H.V.	7	0.0084	2.5

WCDMA Mode

Middle Channel, $f_0 = 836.4\text{MHz}$				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	N.V.	1.42	0.0017	2.5
-20		1.35	0.0016	2.5
-10		1.59	0.0019	2.5
0		1.82	0.0022	2.5
10		1.64	0.0020	2.5
20		1.26	0.0015	2.5
30		2.55	0.0030	2.5
40		2.33	0.0028	2.5
50		2.28	0.0027	2.5
20	L.V.	1.52	0.0018	2.5
	H.V.	1.22	0.0015	2.5

**PCS Band (Part 24E)
GPRS Mode**

Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	1850.0862	1909.9205	1850	1910
-20		1850.0838	1909.9184	1850	1910
-10		1850.0821	1909.9196	1850	1910
0		1850.0823	1909.9178	1850	1910
10		1850.0813	1909.9188	1850	1910
20		1850.0807	1909.9171	1850	1910
30		1850.0847	1909.9176	1850	1910
40		1850.0840	1909.9174	1850	1910
50		1850.0831	1909.9183	1850	1910
20	L.V.	1850.0803	1909.9202	1850	1910
	H.V.	1850.0802	1909.9159	1850	1910

EDGE Mode

Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	1850.0808	1909.9258	1850	1910
-20		1850.0797	1909.9228	1850	1910
-10		1850.0775	1909.9241	1850	1910
0		1850.0744	1909.9208	1850	1910
10		1850.0766	1909.9232	1850	1910
20		1850.0764	1909.9210	1850	1910
30		1850.0750	1909.9252	1850	1910
40		1850.0808	1909.9273	1850	1910
50		1850.0759	1909.9205	1850	1910
20	L.V.	1850.0778	1909.9213	1850	1910
	H.V.	1850.0811	1909.9276	1850	1910

WCDMA Mode

Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	1850.3143	1909.7956	1850	1910
-20		1850.3147	1909.7960	1850	1910
-10		1850.3114	1909.7969	1850	1910
0		1850.3108	1909.7958	1850	1910
10		1850.3136	1909.7961	1850	1910
20		1850.3140	1909.7991	1850	1910
30		1850.3151	1909.7968	1850	1910
40		1850.3150	1909.7959	1850	1910
50		1850.3146	1909.7935	1850	1910
20	L.V.	1850.3186	1909.7984	1850	1910
	H.V.	1850.3145	1909.7987	1850	1910

LTE:
QPSK:
Band 2:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	1850.5146	1909.4851	1850	1910
-20		1850.5153	1909.4882	1850	1910
-10		1850.5211	1909.4852	1850	1910
0		1850.5205	1909.4866	1850	1910
10		1850.5164	1909.4837	1850	1910
20		1850.5158	1909.4880	1850	1910
30		1850.5173	1909.4818	1850	1910
40		1850.5174	1909.4808	1850	1910
50		1850.5174	1909.4815	1850	1910
20	L.V.	1850.5159	1909.4844	1850	1910
	H.V.	1850.5170	1909.4864	1850	1910

Band 4:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	1710.5655	1754.4263	1710	1755
-20		1710.5723	1754.4274	1710	1755
-10		1710.5724	1754.4273	1710	1755
0		1710.5745	1754.4314	1710	1755
10		1710.5722	1754.4288	1710	1755
20		1710.5735	1754.4265	1710	1755
30		1710.5708	1754.4253	1710	1755
40		1710.5721	1754.4277	1710	1755
50		1710.5705	1754.4312	1710	1755
20	L.V.	1710.5642	1754.4325	1710	1755
	H.V.	1710.5683	1754.4322	1710	1755

Band 5:

10.0 MHz Middle Channel, f ₀ =836.5MHz				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	N.V.	-10.84	-0.0130	pass
-20		-5.68	-0.0068	pass
-10		-5.60	-0.0067	pass
0		8.70	0.0104	pass
10		5.47	0.0065	pass
20		9.76	0.0117	pass
30		-6.49	-0.0078	pass
40		8.41	0.0101	pass
50		7.79	0.0093	pass
20	L.V.	9.01	0.0108	pass
	H.V.	5.91	0.0071	pass

Band 7:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	2500.4014	2569.6955	2500	2570
-20		2500.4043	2569.7041	2500	2570
-10		2500.3925	2569.6913	2500	2570
0		2500.3933	2569.6814	2500	2570
10		2500.4020	2569.6962	2500	2570
20		2500.3911	2569.6535	2500	2570
30		2500.3835	2569.6614	2500	2570
40		2500.3634	2569.6921	2500	2570
50		2500.3611	2569.6913	2500	2570
20	L.V.	2500.4515	2569.6823	2500	2570
	H.V.	2500.3634	2569.6745	2500	2570

Band 12:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	699.0922	715.9072	699	716
-20		699.0908	715.9025	699	716
-10		699.0914	715.9122	699	716
0		699.0864	715.9114	699	716
10		699.0893	715.9086	699	716
20		699.0931	715.9125	699	716
30		699.0924	715.9116	699	716
40		699.0912	715.9143	699	716
50		699.0914	715.9125	699	716
20	L.V.	699.0883	715.9111	699	716
	H.V.	699.0925	715.9072	699	716

Band 13:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	777.1294	786.8444	777	787
-20		777.1236	786.8435	777	787
-10		777.1275	786.8421	777	787
0		777.1214	786.8417	777	787
10		777.1248	786.8452	777	787
20		777.1286	786.8461	777	787
30		777.1257	786.8447	777	787
40		777.1282	786.8456	777	787
50		777.1265	786.8417	777	787
20	L.V.	777.1213	786.8451	777	787
	H.V.	777.1265	786.8441	777	787

Band 66:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	1710.1473	1779.8525	1710	1780
-20		1710.1464	1779.8541	1710	1780
-10		1710.1475	1779.8563	1710	1780
0		1710.1416	1779.8568	1710	1780
10		1710.1458	1779.8554	1710	1780
20		1710.1477	1779.8552	1710	1780
30		1710.1453	1779.8533	1710	1780
40		1710.1472	1779.8542	1710	1780
50		1710.1434	1779.8551	1710	1780
20	L.V.	1710.1428	1779.8562	1710	1780
	H.V.	1710.1466	1779.8555	1710	1780

**16QAM:
Band 2:**

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	1850.5172	1909.4864	1850	1910
-20		1850.5168	1909.4892	1850	1910
-10		1850.5179	1909.4848	1850	1910
0		1850.5128	1909.4871	1850	1910
10		1850.5154	1909.4856	1850	1910
20		1850.5188	1909.4882	1850	1910
30		1850.5129	1909.4889	1850	1910
40		1850.5178	1909.4864	1850	1910
50		1850.5178	1909.4882	1850	1910
20	L.V.	1850.5147	1909.4826	1850	1910
	H.V.	1850.5144	1909.4834	1850	1910

Band 4:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	1710.5911	1754.5652	1710	1755
-20		1710.5922	1754.5672	1710	1755
-10		1710.5884	1754.5743	1710	1755
0		1710.5943	1754.5695	1710	1755
10		1710.5954	1754.5683	1710	1755
20		1710.5932	1754.5742	1710	1755
30		1710.5943	1754.5673	1710	1755
40		1710.5858	1754.5665	1710	1755
50		1710.5927	1754.5714	1710	1755
20	L.V.	1710.5954	1754.5672	1710	1755
	H.V.	1710.5926	1754.5661	1710	1755

Band 5:

10.0 MHz Middle Channel, $f_0=836.5\text{MHz}$				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	N.V.	-12.52	-0.0150	pass
-20		8.13	0.0097	pass
-10		-9.87	-0.0118	pass
0		-8.39	-0.0100	pass
10		-6.72	-0.0080	pass
20		6.85	0.0082	pass
30		-6.70	-0.0080	pass
40		-8.50	-0.0102	pass
50		6.49	0.0078	pass
20	L.V.	-9.74	-0.0116	pass
	H.V.	8.03	0.0096	pass

Band 7:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	2500.5625	2569.3615	2500	2570
-20		2500.6541	2569.3647	2500	2570
-10		2500.6518	2569.3522	2500	2570
0		2500.6433	2569.3625	2500	2570
10		2500.6546	2569.4336	2500	2570
20		2500.6412	2569.3972	2500	2570
30		2500.6527	2569.3955	2500	2570
40		2500.6515	2569.3532	2500	2570
50		2500.6513	2569.3527	2500	2570
20	L.V.	2500.6425	2569.4415	2500	2570
	H.V.	2500.5612	2569.4362	2500	2570

Band 12:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	699.2932	715.8967	699	716
-20		699.2953	715.8894	699	716
-10		699.2942	715.8891	699	716
0		699.2946	715.8832	699	716
10		699.2927	715.8908	699	716
20		699.2925	715.8879	699	716
30		699.2961	715.8913	699	716
40		699.2901	715.8865	699	716
50		699.2964	715.8882	699	716
20	L.V.	699.2953	715.8873	699	716
	H.V.	699.2962	715.8911	699	716

Band 13:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	777.0315	786.9260	777	787
-20		777.0325	786.9245	777	787
-10		777.0326	786.9244	777	787
0		777.0341	786.9273	777	787
10		777.0315	786.9237	777	787
20		777.0322	786.9242	777	787
30		777.0311	786.9215	777	787
40		777.0317	786.9243	777	787
50		777.0296	786.9245	777	787
20	L.V.	777.0357	786.9254	777	787
	H.V.	777.0345	786.9216	777	787

Band 66:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	1710.1472	1779.8544	1710	1780
-20		1710.1465	1779.8554	1710	1780
-10		1710.1467	1779.8533	1710	1780
0		1710.1415	1779.8562	1710	1780
10		1710.1443	1779.8551	1710	1780
20		1710.1482	1779.8577	1710	1780
30		1710.1464	1779.8562	1710	1780
40		1710.1474	1779.8597	1710	1780
50		1710.1433	1779.8558	1710	1780
20	L.V.	1710.1436	1779.8582	1710	1780
	H.V.	1710.1472	1779.8545	1710	1780

***** END OF REPORT *****