



TESTREPORT

Applicant Name : TECNO MOBILE LIMITED
Address : FLAT 39 8/F BLOCK D WAH LOK INDUSTRIAL CENTRE 31-35
SHAN MEI STREET FOTAN NT Hong Kong
Report Number: SZNS220224-05720E-RF-00D
FCC ID: 2ADYY-KH7

Test Standard (s)

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

Sample Description

Product Type: Mobile Phone
Model No.: KH7
Multiple Model(s) No.: N/A
Trade Mark: TECNO
Date Received: 2022/02/24
Report Date: 2022/04/06

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

Prepared and Checked By:

Ting Lü
EMC Engineer

Approved By:

Robert Li
EMC Engineer

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

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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 4: 1710-1755MHz(TX); 2110-2155MHz(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 17: 704-716MHz(TX); 734-746MHz(RX) LTE Band 38: 2570-2620MHz(TX/RX) LTE Band 41: 2535-2655MHz(TX/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: -1.5dBi PCS1900/WCDMA Band 2/ LTE Band 2: -0.5dBi WCDMA Band 4/ LTE Band 4/ LTE Band 66: -0.7dBi LTE Band 7/ LTE Band 38/LTE Band 41: -0.4dBi LTE Band 12/LTE Band 17: -1.9dBi(provided by the applicant)
Voltage Range	DC 3.85V from battery, DC 5.0V or 7.5V from adapter
Sample serial number	SZNS220224-05720E-RF-S1 for Conducted and Radiated Emissions SZNS220224-05720E-RF-S5 for RF Conducted Test (Assigned by ATC)
Sample/EUT Status	Good condition
Adapter information	Model: U180TSA Input: AC 100-240V, 50/60Hz, 0.6A Output: DC 5.0V, 2.4A or DC 7.5V, 2.4A, 18.0W MAX
Extreme condition*	L.V.: Low Voltage 3.45V N.V.: Normal Voltage 3.85V H.V.: High Voltage 4.40V (provided by the applicant)

Objective

This test report is in accordance with Part 2-Subpart J, Part 22-Subpart H, Part 24-Subpart E, and Subpart 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.

Each test item follows test standards and with no deviation.

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 °C
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 429 7.01.

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 B4	4.2	1712.4	1732.6	1752.6
WCDMA B5	4.2	826.4	836.6	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
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 B17	5	706.5	710	713.5
	10	709	710	711

Frequency band	Bandwidth (MHz)	Test Frequency(MHz)		
		Low	Middle	High
LTE B38	5	2572.5	2595	2617.5
	10	2575	2595	2615
	15	2577.5	2595	2612.5
	20	2580	2595	2610
LTE B41	5	2537.5	2595	2652.5
	10	2540	2595	2650
	15	2542.5	2595	2647.5
	20	2545	2595	2645
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.

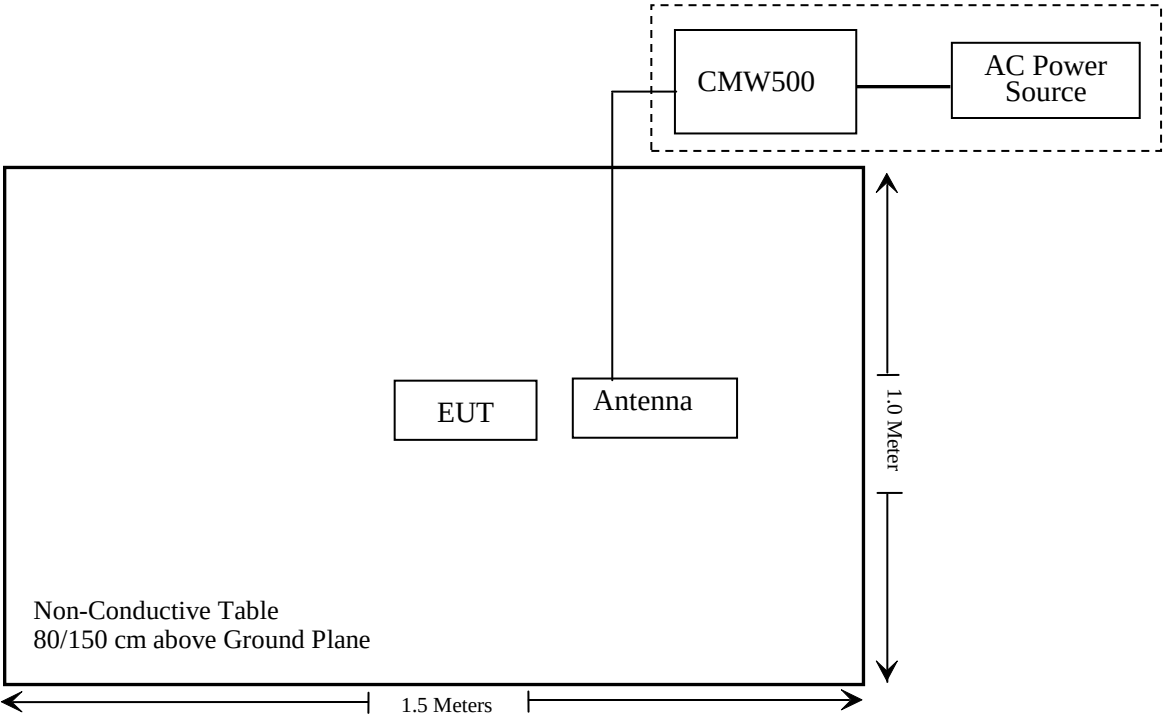
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	154606

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); § 24.232 (c); §27.50 (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 (h) (m)	Band Edge	Compliant
§ 2.1055; § 22.355; § 24.235; §27.54;	Frequency stability	Compliant

Note: * Please refer to SAR report number: SZNS220224-05720E-SA.

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	2021/07/06	2022/07/05
Rohde & Schwarz	Spectrum Analyzer	FSV-40	101948	2021/12/13	2022/12/12
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	154606	2021/12/13	2022/12/12
Mini-Circuits	Power Splitter	DC-18000MHz	SF10944151S	2021/12/14	2022/12/13
Gongwen	Temp. & Humid. Chamber	HSD-500	109	2021/10/14	2022/10/13
WEINSCHL	10dB Attenuator	5324	AU 3842	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	
Unknown	RF Coaxial Cable	No.34	RF-04	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: SZNS220224-05720E-SA.

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)& § 24.232(c); §27.50(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(c), 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.

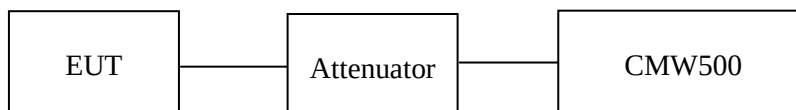
According to §27.50(d), Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

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

Test Procedure

Conducted method:

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

**Test Data****Environmental Conditions**

Temperature:	27.2 °C
Relative Humidity:	56.2 %
ATM Pressure:	101.0 kPa

The testing was performed by Key Pei from 2022-03-12 to 2022-03-26.

Conducted Power**Cellular Band (Part 22H)**

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	ERP(dBm)	Limit (dBm)
GSM	128	824.2	32.28	28.63	38.45
	190	836.6	32.35	28.70	38.45
	251	848.8	32.25	28.60	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	
GPRS	128	824.2	32.30	31.25	29.17	28.01	28.65	27.60	25.52	24.36	38.45
	190	836.6	32.36	31.30	29.21	28.05	28.71	27.65	25.56	24.40	38.45
	251	848.8	32.27	31.32	29.13	27.95	28.62	27.67	25.48	24.30	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	
EGPRS	128	824.2	26.28	25.00	22.74	21.30	22.63	21.35	19.09	17.65	38.45
	190	836.6	26.26	25.16	23.12	22.06	22.61	21.51	19.47	18.41	38.45
	251	848.8	26.35	25.27	22.99	21.51	22.70	21.62	19.34	17.86	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		23.84	23.76	23.62	20.19	20.11	19.97
	HSDPA	1	22.85	22.67	22.66	19.20	19.02	19.01
		2	22.86	22.69	22.18	19.21	19.04	18.53
		3	22.77	22.82	22.12	19.12	19.17	18.47
		4	22.69	22.59	22.25	19.04	18.94	18.60
	HSUPA	1	22.44	22.24	22.35	18.79	18.59	18.70
		2	22.22	22.38	22.28	18.57	18.73	18.63
		3	22.32	22.40	22.16	18.67	18.75	18.51
		4	22.46	22.32	22.14	18.81	18.67	18.49
		5	22.31	22.33	22.26	18.66	18.68	18.61
	HSPA+	1	22.42	22.25	22.22	18.77	18.60	18.57

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd)
 For GSM850 / WCDMA Band5: Antenna Gain = -1.5dBi = -3.65dBd (0dBd=2.15dBi))
 Limit: ERP ≤ 38.45dBm

PCS Band (Part 24E)

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	EIRP(dBm)	Limit (dBm)
GSM	512	1850.2	28.56	28.06	33
	661	1880.0	28.57	28.07	33
	810	1909.8	28.68	28.18	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	
GPRS	512	1850.2	28.59	28.12	27.08	26.45	28.09	27.62	26.58	25.95	33
	661	1880.0	28.60	28.13	27.09	26.44	28.10	27.63	26.59	25.94	33
	810	1909.8	28.71	28.26	27.20	26.56	28.21	27.76	26.70	26.06	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	
EGPRS	512	1850.2	27.49	26.55	24.54	23.51	26.99	26.05	24.04	23.01	33
	661	1880.0	27.05	25.98	24.10	22.99	26.55	25.48	23.60	22.49	33
	810	1909.8	26.80	25.66	23.87	22.81	26.30	25.16	23.37	22.31	33

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 2)	RMC12.2k		19.87	19.68	19.57	19.37	19.18	19.07
	HSDPA	1	18.86	18.61	18.56	18.36	18.11	18.06
		2	18.81	18.49	18.48	18.31	17.99	17.98
		3	18.71	18.45	18.36	18.21	17.95	17.86
		4	18.65	18.41	18.29	18.15	17.91	17.79
	HSUPA	1	18.37	18.26	18.19	17.87	17.76	17.69
		2	18.29	18.17	18.07	17.79	17.67	17.57
		3	18.25	18.14	17.94	17.75	17.64	17.44
		4	18.21	18.09	17.89	17.71	17.59	17.39
		5	18.46	18.02	17.80	17.96	17.52	17.30
	HSPA+	1	18.06	18.07	17.90	17.56	17.57	17.40

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
 For PCS1900 / WCDMA Band2: Antenna Gain = -0.5dBi
 Limit: EIRP ≤ 33dBm

AWS Band

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 4)	RMC12.2k		17.81	17.94	17.93	17.11	17.24	17.23
	HSDPA	1	16.77	16.88	16.89	16.07	16.18	16.19
		2	16.65	16.80	16.82	15.95	16.10	16.12
		3	16.59	16.76	16.73	15.89	16.06	16.03
		4	16.55	16.70	16.64	15.85	16.00	15.94
	HSUPA	1	16.40	16.51	16.49	15.70	15.81	15.79
		2	16.33	16.41	16.42	15.63	15.71	15.72
		3	16.30	16.28	16.31	15.60	15.58	15.61
		4	16.17	16.24	16.26	15.47	15.54	15.56
		5	16.46	16.11	16.22	15.76	15.41	15.52
	HSPA+	1	16.23	16.33	16.34	15.53	15.63	15.64

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

For Band4: Antenna Gain = -0.7dBi

Limit: EIRP ≤ 30dBm

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	15.47	15.43	16.13	14.97	14.93	15.63
		RB1#3	16.03	16.51	16.37	15.53	16.01	15.87
		RB1#5	16.80	16.45	16.13	16.30	15.95	15.63
		RB3#0	16.95	16.59	16.20	16.45	16.09	15.70
		RB3#3	16.98	16.54	16.25	16.48	16.04	15.75
		RB6#0	16.85	16.50	16.20	16.35	16.00	15.70
	16QAM	RB1#0	16.84	16.45	16.23	16.34	15.95	15.73
		RB1#3	16.99	16.60	16.40	16.49	16.10	15.90
		RB1#5	16.89	16.45	16.26	16.39	15.95	15.76
		RB3#0	16.11	16.71	16.21	15.61	16.21	15.71
		RB3#3	16.04	16.80	16.20	15.54	16.30	15.70
		RB6#0	15.83	15.51	15.21	15.33	15.01	14.71
3.0	QPSK	RB1#0	16.92	16.55	16.26	16.42	16.05	15.76
		RB1#8	16.87	16.56	16.24	16.37	16.06	15.74
		RB1#14	16.79	16.51	16.21	16.29	16.01	15.71
		RB6#0	16.86	16.47	16.18	16.36	15.97	15.68
		RB6#9	16.83	16.43	16.16	16.33	15.93	15.66
		RB15#0	16.91	16.49	16.21	16.41	15.99	15.71
	16QAM	RB1#0	16.57	16.67	16.30	16.07	16.17	15.80
		RB1#8	16.51	16.65	16.24	16.01	16.15	15.74
		RB1#14	16.46	16.64	16.17	15.96	16.14	15.67
		RB6#0	15.94	15.51	15.13	15.44	15.01	14.63
		RB6#9	15.92	15.50	15.10	15.42	15.00	14.60
		RB15#0	16.00	15.46	15.25	15.50	14.96	14.75

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	16.80	16.47	16.16	16.30	15.97	15.66
		RB1#13	16.95	16.55	16.26	16.45	16.05	15.76
		RB1#24	16.77	16.42	16.12	16.27	15.92	15.62
		RB15#0	16.85	16.51	16.25	16.35	16.01	15.75
		RB15#10	16.90	16.49	16.26	16.40	15.99	15.76
		RB25#0	16.84	16.48	16.21	16.34	15.98	15.71
	16QAM	RB1#0	16.71	16.76	16.28	16.21	16.26	15.78
		RB1#13	16.79	16.85	16.31	16.29	16.35	15.81
		RB1#24	16.64	16.68	16.20	16.14	16.18	15.70
		RB15#0	15.95	15.50	15.30	15.45	15.00	14.80
		RB15#10	15.95	15.49	15.25	15.45	14.99	14.75
		RB25#0	15.91	15.48	15.23	15.41	14.98	14.73
10.0	QPSK	RB1#0	16.88	16.59	16.28	16.38	16.09	15.78
		RB1#25	17.00	16.67	16.40	16.50	16.17	15.90
		RB1#49	16.76	16.49	16.20	16.26	15.99	15.70
		RB25#0	16.84	16.58	16.46	16.34	16.08	15.96
		RB25#25	16.80	16.54	16.28	16.30	16.04	15.78
		RB50#0	16.85	16.57	16.37	16.35	16.07	15.87
	16QAM	RB1#0	16.52	16.74	16.32	16.02	16.24	15.82
		RB1#25	16.67	16.73	16.44	16.17	16.23	15.94
		RB1#49	16.39	16.64	16.23	15.89	16.14	15.73
		RB25#0	15.90	15.62	15.56	15.40	15.12	15.06
		RB25#25	15.92	15.56	15.36	15.42	15.06	14.86
		RB50#0	15.84	15.58	15.39	15.34	15.08	14.89

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	16.81	16.54	16.21	16.31	16.04	15.71
		RB1#38	16.80	16.56	16.29	16.30	16.06	15.79
		RB1#74	16.62	16.37	16.14	16.12	15.87	15.64
		RB36#0	16.79	16.60	16.47	16.29	16.10	15.97
		RB36#39	16.73	16.54	16.25	16.23	16.04	15.75
		RB75#0	16.75	16.57	16.40	16.25	16.07	15.90
	16QAM	RB1#0	16.42	16.68	16.63	15.92	16.18	16.13
		RB1#38	16.46	16.69	16.70	15.96	16.19	16.20
		RB1#74	16.26	16.49	16.52	15.76	15.99	16.02
		RB36#0	15.83	15.59	15.43	15.33	15.09	14.93
		RB36#39	15.73	15.56	15.21	15.23	15.06	14.71
		RB75#0	15.76	15.58	15.35	15.26	15.08	14.85
20.0	QPSK	RB1#0	16.62	16.37	16.05	16.12	15.87	15.55
		RB1#50	16.01	16.69	16.42	15.51	16.19	15.92
		RB1#99	16.43	16.19	16.95	15.93	15.69	16.45
		RB50#0	16.78	16.67	16.53	16.28	16.17	16.03
		RB50#50	16.53	16.61	16.11	16.03	16.11	15.61
		RB100#0	16.69	16.63	16.39	16.19	16.13	15.89
	16QAM	RB1#0	16.94	16.61	16.71	16.44	16.11	16.21
		RB1#50	16.33	16.98	16.04	15.83	16.48	15.54
		RB1#99	16.72	16.43	16.56	16.22	15.93	16.06
		RB50#0	15.80	15.65	15.56	15.30	15.15	15.06
		RB50#50	15.57	15.66	15.13	15.07	15.16	14.63
		RB100#0	15.70	15.65	15.38	15.20	15.15	14.88

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

For Band2: Antenna Gain = -0.5dBi

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	16.03	16.27	16.20	15.33	15.57	15.50
		RB1#3	16.19	16.42	16.33	15.49	15.72	15.63
		RB1#5	16.03	16.24	16.20	15.33	15.54	15.50
		RB3#0	16.12	16.38	16.37	15.42	15.68	15.67
		RB3#3	16.14	16.30	16.55	15.44	15.60	15.85
		RB6#0	15.08	15.30	15.27	14.38	14.60	14.57
	16QAM	RB1#0	15.09	15.43	15.28	14.39	14.73	14.58
		RB1#3	15.27	15.62	15.40	14.57	14.92	14.70
		RB1#5	15.10	15.41	15.36	14.40	14.71	14.66
		RB3#0	15.41	15.40	15.58	14.71	14.70	14.88
		RB3#3	15.42	15.41	15.63	14.72	14.71	14.93
		RB6#0	14.18	14.35	14.27	13.48	13.65	13.57
3.0	QPSK	RB1#0	16.09	16.34	16.31	15.39	15.64	15.61
		RB1#8	16.06	16.27	16.26	15.36	15.57	15.56
		RB1#14	16.08	16.33	16.28	15.38	15.63	15.58
		RB6#0	15.08	15.28	15.25	14.38	14.58	14.55
		RB6#9	15.10	15.25	15.26	14.40	14.55	14.56
		RB15#0	15.18	15.32	15.31	14.48	14.62	14.61
	16QAM	RB1#0	15.86	15.50	15.46	15.16	14.80	14.76
		RB1#8	15.79	15.51	15.37	15.09	14.81	14.67
		RB1#14	15.79	15.53	15.37	15.09	14.83	14.67
		RB6#0	14.20	14.35	14.29	13.50	13.65	13.59
		RB6#9	14.17	14.34	14.24	13.47	13.64	13.54
		RB15#0	14.23	14.36	14.46	13.53	13.66	13.76

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	16.04	16.22	16.26	15.34	15.52	15.56
		RB1#13	16.14	16.31	16.31	15.44	15.61	15.61
		RB1#24	16.07	16.28	16.27	15.37	15.58	15.57
		RB15#0	15.06	15.33	15.42	14.36	14.63	14.72
		RB15#10	15.19	15.35	15.34	14.49	14.65	14.64
		RB25#0	15.14	15.32	15.33	14.44	14.62	14.63
	16QAM	RB1#0	15.00	15.60	15.44	14.30	14.90	14.74
		RB1#13	15.06	15.72	15.49	14.36	15.02	14.79
		RB1#24	15.03	15.63	15.42	14.33	14.93	14.72
		RB15#0	14.21	14.33	14.45	13.51	13.63	13.75
		RB15#10	14.24	14.33	14.42	13.54	13.63	13.72
		RB25#0	14.23	14.36	14.41	13.53	13.66	13.71
10.0	QPSK	RB1#0	16.04	16.28	16.31	15.34	15.58	15.61
		RB1#25	16.25	16.44	16.42	15.55	15.74	15.72
		RB1#49	16.18	16.27	16.26	15.48	15.57	15.56
		RB25#0	15.11	15.44	15.43	14.41	14.74	14.73
		RB25#25	15.33	15.42	15.40	14.63	14.72	14.70
		RB50#0	15.22	15.37	15.44	14.52	14.67	14.74
	16QAM	RB1#0	15.81	15.49	15.39	15.11	14.79	14.69
		RB1#25	15.99	15.69	15.55	15.29	14.99	14.85
		RB1#49	15.95	15.53	15.36	15.25	14.83	14.66
		RB25#0	14.21	14.50	14.55	13.51	13.80	13.85
		RB25#25	14.40	14.47	14.54	13.70	13.77	13.84
		RB50#0	14.29	14.46	14.48	13.59	13.76	13.78

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	15.99	16.23	16.21	15.29	15.53	15.51
		RB1#38	16.17	16.36	16.39	15.47	15.66	15.69
		RB1#74	16.18	16.23	16.19	15.48	15.53	15.49
		RB36#0	15.14	15.40	15.37	14.44	14.70	14.67
		RB36#39	15.35	15.43	15.41	14.65	14.73	14.71
		RB75#0	15.24	15.41	15.41	14.54	14.71	14.71
	16QAM	RB1#0	15.76	15.45	15.76	15.06	14.75	15.06
		RB1#38	15.92	15.58	15.90	15.22	14.88	15.20
		RB1#74	15.90	15.43	15.73	15.20	14.73	15.03
		RB36#0	14.15	14.43	14.38	13.45	13.73	13.68
		RB36#39	14.37	14.43	14.37	13.67	13.73	13.67
		RB75#0	14.27	14.44	14.40	13.57	13.74	13.70
20.0	QPSK	RB1#0	15.86	16.00	16.00	15.16	15.30	15.30
		RB1#50	16.43	16.56	16.51	15.73	15.86	15.81
		RB1#99	16.09	16.09	16.05	15.39	15.39	15.35
		RB50#0	15.14	15.47	15.42	14.44	14.77	14.72
		RB50#50	15.36	15.45	15.44	14.66	14.75	14.74
		RB100#0	15.25	15.46	15.45	14.55	14.76	14.75
	16QAM	RB1#0	15.24	15.33	15.71	14.54	14.63	15.01
		RB1#50	15.87	15.78	16.18	15.17	15.08	15.48
		RB1#99	15.49	15.42	15.74	14.79	14.72	15.04
		RB50#0	14.15	14.52	14.44	13.45	13.82	13.74
		RB50#50	14.36	14.47	14.50	13.66	13.77	13.80
		RB100#0	14.31	14.50	14.50	13.61	13.80	13.80

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

For Band4: Antenna Gain = -0.7dBi

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	23.71	23.79	23.68	20.06	20.14	20.03
		RB1#3	23.88	23.98	23.88	20.23	20.33	20.23
		RB1#5	23.70	23.80	23.70	20.05	20.15	20.05
		RB3#0	23.77	23.86	23.78	20.12	20.21	20.13
		RB3#3	23.80	23.76	23.80	20.15	20.11	20.15
		RB6#0	22.75	22.90	22.80	19.10	19.25	19.15
	16QAM	RB1#0	22.69	22.87	22.66	19.04	19.22	19.01
		RB1#3	22.88	23.04	22.89	19.23	19.39	19.24
		RB1#5	22.73	22.85	22.70	19.08	19.20	19.05
		RB3#0	22.94	22.74	22.84	19.29	19.09	19.19
		RB3#3	22.99	22.75	22.81	19.34	19.10	19.16
		RB6#0	21.84	21.89	21.77	18.19	18.24	18.12
3.0	QPSK	RB1#0	23.73	23.90	23.80	20.08	20.25	20.15
		RB1#8	23.80	23.88	23.79	20.15	20.23	20.14
		RB1#14	23.75	23.88	23.78	20.10	20.23	20.13
		RB6#0	22.70	22.83	22.71	19.05	19.18	19.06
		RB6#9	22.76	22.80	22.71	19.11	19.15	19.06
		RB15#0	22.78	22.83	22.76	19.13	19.18	19.11
	16QAM	RB1#0	23.29	22.99	22.80	19.64	19.34	19.15
		RB1#8	23.33	22.94	22.76	19.68	19.29	19.11
		RB1#14	23.28	22.97	22.73	19.63	19.32	19.08
		RB6#0	21.86	21.89	21.76	18.21	18.24	18.11
		RB6#9	21.90	21.88	21.74	18.25	18.23	18.09
		RB15#0	21.89	21.81	21.86	18.24	18.16	18.21

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	23.64	23.79	23.71	19.99	20.14	20.06
		RB1#13	23.82	23.87	23.78	20.17	20.22	20.13
		RB1#24	23.71	23.75	23.65	20.06	20.10	20.00
		RB15#0	22.78	22.86	22.84	19.13	19.21	19.19
		RB15#10	22.88	22.85	22.77	19.23	19.20	19.12
		RB25#0	22.82	22.81	22.74	19.17	19.16	19.09
	16QAM	RB1#0	22.57	22.93	22.76	18.92	19.28	19.11
		RB1#13	22.74	23.08	22.86	19.09	19.43	19.21
		RB1#24	22.60	23.00	22.71	18.95	19.35	19.06
		RB15#0	21.93	21.85	21.89	18.28	18.20	18.24
		RB15#10	21.96	21.84	21.85	18.31	18.19	18.20
		RB25#0	21.92	21.85	21.82	18.27	18.20	18.17
10.0	QPSK	RB1#0	23.71	23.85	23.81	20.06	20.20	20.16
		RB1#25	23.97	23.96	23.95	20.32	20.31	20.30
		RB1#49	23.87	23.80	23.80	20.22	20.15	20.15
		RB25#0	22.76	22.87	22.86	19.11	19.22	19.21
		RB25#25	22.82	22.80	22.82	19.17	19.15	19.17
		RB50#0	22.83	22.83	22.85	19.18	19.18	19.20
	16QAM	RB1#0	23.28	22.91	22.81	19.63	19.26	19.16
		RB1#25	23.40	23.02	22.95	19.75	19.37	19.30
		RB1#49	23.23	22.97	22.75	19.58	19.32	19.10
		RB25#0	21.87	21.91	22.00	18.22	18.26	18.35
		RB25#25	21.95	21.89	21.97	18.30	18.24	18.32
		RB50#0	21.89	21.89	21.96	18.24	18.24	18.31

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd)
 For Band5: Antenna Gain = -1.5dBi = -3.65dBd (0dBd=2.15dBi)
 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	18.28	17.91	18.49	17.88	17.51	18.09
		RB1#13	18.40	18.04	18.65	18.00	17.64	18.25
		RB1#24	18.25	17.92	18.45	17.85	17.52	18.05
		RB15#0	17.32	17.04	17.62	16.92	16.64	17.22
		RB15#10	17.39	17.04	17.59	16.99	16.64	17.19
		RB25#0	17.30	17.01	17.60	16.90	16.61	17.20
	16QAM	RB1#0	17.47	16.99	17.40	17.07	16.59	17.00
		RB1#13	17.65	17.09	17.51	17.25	16.69	17.11
		RB1#24	17.46	17.00	17.33	17.06	16.60	16.93
		RB15#0	16.38	16.13	16.72	15.98	15.73	16.32
		RB15#10	16.40	16.12	16.66	16.00	15.72	16.26
		RB25#0	16.35	16.14	16.68	15.95	15.74	16.28
10.0	QPSK	RB1#0	18.37	18.01	18.63	17.97	17.61	18.23
		RB1#25	18.53	18.19	18.75	18.13	17.79	18.35
		RB1#49	18.25	18.07	18.59	17.85	17.67	18.19
		RB25#0	17.42	17.09	17.70	17.02	16.69	17.30
		RB25#25	17.39	17.13	17.63	16.99	16.73	17.23
		RB50#0	17.36	17.09	17.65	16.96	16.69	17.25
	16QAM	RB1#0	17.80	17.14	17.61	17.40	16.74	17.21
		RB1#25	17.96	17.39	17.78	17.56	16.99	17.38
		RB1#49	17.72	17.23	17.57	17.32	16.83	17.17
		RB25#0	16.47	16.15	16.84	16.07	15.75	16.44
		RB25#25	16.47	16.24	16.77	16.07	15.84	16.37
		RB50#0	16.42	16.16	16.74	16.02	15.76	16.34

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	18.27	17.95	18.52	17.87	17.55	18.12
		RB1#38	18.32	18.06	18.67	17.92	17.66	18.27
		RB1#74	18.09	18.06	18.52	17.69	17.66	18.12
		RB36#0	17.42	17.13	17.72	17.02	16.73	17.32
		RB36#39	17.42	17.21	17.75	17.02	16.81	17.35
		RB75#0	17.44	17.17	17.70	17.04	16.77	17.30
	16QAM	RB1#0	17.76	17.07	17.81	17.36	16.67	17.41
		RB1#38	17.77	17.14	18.03	17.37	16.74	17.63
		RB1#74	17.64	17.20	17.83	17.24	16.80	17.43
		RB36#0	16.44	16.16	16.69	16.04	15.76	16.29
		RB36#39	16.38	16.25	16.66	15.98	15.85	16.26
		RB75#0	16.44	16.19	16.71	16.04	15.79	16.31
20.0	QPSK	RB1#0	18.15	17.82	18.20	17.75	17.42	17.80
		RB1#50	18.47	18.21	18.68	18.07	17.81	18.28
		RB1#99	17.84	18.02	18.28	17.44	17.62	17.88
		RB50#0	17.28	17.00	17.56	16.88	16.60	17.16
		RB50#50	17.24	17.13	17.56	16.84	16.73	17.16
		RB100#0	17.26	17.10	17.61	16.86	16.70	17.21
	16QAM	RB1#0	17.38	16.98	17.72	16.98	16.58	17.32
		RB1#50	17.64	17.41	18.22	17.24	17.01	17.82
		RB1#99	17.10	17.16	17.82	16.70	16.76	17.42
		RB50#0	16.30	16.02	16.54	15.90	15.62	16.14
		RB50#50	16.26	16.18	16.61	15.86	15.78	16.21
		RB100#0	16.32	16.13	16.63	15.92	15.73	16.23

Note: $ERP(dBm) = \text{Conducted Power}(dBm) + \text{Antenna Gain}(dBi)$
For Band7: Antenna Gain = -0.4dBi
Limit: $EIRP \leq 33dBm$

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	23.03	23.13	23.15	18.98	19.08	19.10
		RB1#3	23.20	23.29	23.39	19.15	19.24	19.34
		RB1#5	23.07	23.12	23.18	19.02	19.07	19.13
		RB3#0	23.14	23.23	23.30	19.09	19.18	19.25
		RB3#3	23.15	23.23	23.31	19.10	19.18	19.26
		RB6#0	22.09	22.23	22.32	18.04	18.18	18.27
	16QAM	RB1#0	22.09	22.34	22.21	18.04	18.29	18.16
		RB1#3	22.28	22.49	22.37	18.23	18.44	18.32
		RB1#5	22.20	22.34	22.24	18.15	18.29	18.19
		RB3#0	22.38	22.29	22.36	18.33	18.24	18.31
		RB3#3	22.42	22.31	22.37	18.37	18.26	18.32
		RB6#0	21.18	21.30	21.23	17.13	17.25	17.18
3.0	QPSK	RB1#0	23.11	23.20	23.29	19.06	19.15	19.24
		RB1#8	23.13	23.21	23.25	19.08	19.16	19.20
		RB1#14	23.10	23.17	23.27	19.05	19.12	19.22
		RB6#0	22.14	22.16	22.26	18.09	18.11	18.21
		RB6#9	22.19	22.17	22.26	18.14	18.12	18.21
		RB15#0	22.23	22.24	22.32	18.18	18.19	18.27
	16QAM	RB1#0	22.77	22.42	22.38	18.72	18.37	18.33
		RB1#8	22.78	22.39	22.30	18.73	18.34	18.25
		RB1#14	22.75	22.39	22.28	18.70	18.34	18.23
		RB6#0	21.25	21.26	21.22	17.20	17.21	17.17
		RB6#9	21.29	21.26	21.20	17.24	17.21	17.15
		RB15#0	21.32	21.28	21.35	17.27	17.23	17.30

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	23.07	23.12	23.14	19.02	19.07	19.09
		RB1#13	23.16	23.23	23.27	19.11	19.18	19.22
		RB1#24	23.09	23.13	23.16	19.04	19.08	19.11
		RB15#0	22.17	22.33	22.36	18.12	18.28	18.31
		RB15#10	22.27	22.28	22.29	18.22	18.23	18.24
		RB25#0	22.23	22.29	22.30	18.18	18.24	18.25
	16QAM	RB1#0	22.05	22.49	22.24	18.00	18.44	18.19
		RB1#13	22.13	22.61	22.40	18.08	18.56	18.35
		RB1#24	22.06	22.49	22.27	18.01	18.44	18.22
		RB15#0	21.28	21.32	21.39	17.23	17.27	17.34
		RB15#10	21.32	21.28	21.34	17.27	17.23	17.29
		RB25#0	21.27	21.31	21.35	17.22	17.26	17.30
10.0	QPSK	RB1#0	23.12	23.19	23.22	19.07	19.14	19.17
		RB1#25	23.30	23.34	23.37	19.25	19.29	19.32
		RB1#49	23.17	23.25	23.29	19.12	19.20	19.24
		RB25#0	22.22	22.39	22.29	18.17	18.34	18.24
		RB25#25	22.22	22.39	22.34	18.17	18.34	18.29
		RB50#0	22.25	22.38	22.32	18.20	18.33	18.27
	16QAM	RB1#0	22.77	22.43	22.31	18.72	18.38	18.26
		RB1#25	22.93	22.60	22.46	18.88	18.55	18.41
		RB1#49	22.85	22.44	22.32	18.80	18.39	18.27
		RB25#0	21.27	21.42	21.45	17.22	17.37	17.40
		RB25#25	21.32	21.45	21.47	17.27	17.40	17.42
		RB50#0	21.30	21.42	21.36	17.25	17.37	17.31

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd)
 For Band12: Antenna Gain = -1.9dBi = -4.05dBd (0dBd=2.15dBi)
 Limit: ERP ≤ 34.77dBm

LTE Band 17

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	23.06	23.15	23.11	19.01	19.10	19.06
		RB1#13	23.26	23.26	23.30	19.21	19.21	19.25
		RB1#24	23.13	23.16	23.21	19.08	19.11	19.16
		RB15#0	22.34	22.28	22.32	18.29	18.23	18.27
		RB15#10	22.29	22.31	22.33	18.24	18.26	18.28
		RB25#0	22.31	22.30	22.28	18.26	18.25	18.23
	16QAM	RB1#0	22.07	22.51	22.28	18.02	18.46	18.23
		RB1#13	22.25	22.65	22.39	18.20	18.60	18.34
		RB1#24	22.09	22.50	22.31	18.04	18.45	18.26
		RB15#0	21.40	21.31	21.38	17.35	17.26	17.33
		RB15#10	21.34	21.35	21.37	17.29	17.30	17.32
		RB25#0	21.38	21.33	21.34	17.33	17.28	17.29
10.0	QPSK	RB1#0	23.14	23.19	23.21	19.09	19.14	19.16
		RB1#25	23.31	23.34	23.38	19.26	19.29	19.33
		RB1#49	23.22	23.28	23.32	19.17	19.23	19.27
		RB25#0	22.37	22.33	22.33	18.32	18.28	18.28
		RB25#25	22.44	22.34	22.33	18.39	18.29	18.28
		RB50#0	22.39	22.34	22.35	18.34	18.29	18.30
	16QAM	RB1#0	22.77	22.45	22.33	18.72	18.40	18.28
		RB1#25	23.01	22.56	22.43	18.96	18.51	18.38
		RB1#49	22.83	22.47	22.34	18.78	18.42	18.29
		RB25#0	21.46	21.36	21.46	17.41	17.31	17.41
		RB25#25	21.50	21.40	21.46	17.45	17.35	17.41
		RB50#0	21.46	21.39	21.41	17.41	17.34	17.36

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd)
 For Band17: Antenna Gain = -1.9dBi = -4.05dBd (0dBd=2.15dBi)
 Limit: ERP≤34.77dBm

LTE Band 38

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	19.70	19.84	19.71	19.30	19.44	19.31
		RB1#13	19.90	19.96	19.84	19.50	19.56	19.44
		RB1#24	19.79	19.85	19.70	19.39	19.45	19.30
		RB15#0	18.82	18.92	18.82	18.42	18.52	18.42
		RB15#10	18.82	18.94	18.79	18.42	18.54	18.39
		RB25#0	18.82	18.94	18.80	18.42	18.54	18.40
	16QAM	RB1#0	18.78	19.10	18.74	18.38	18.70	18.34
		RB1#13	19.01	19.25	18.85	18.61	18.85	18.45
		RB1#24	18.87	19.08	18.74	18.47	18.68	18.34
		RB15#0	17.82	17.94	17.67	17.42	17.54	17.27
		RB15#10	17.85	17.98	17.77	17.45	17.58	17.37
		RB25#0	17.86	17.89	17.79	17.46	17.49	17.39
10.0	QPSK	RB1#0	19.82	19.96	19.90	19.42	19.56	19.50
		RB1#25	20.15	20.19	20.12	19.75	19.79	19.72
		RB1#49	19.96	19.94	19.83	19.56	19.54	19.43
		RB25#0	18.85	18.96	18.87	18.45	18.56	18.47
		RB25#25	18.86	19.00	18.81	18.46	18.60	18.41
		RB50#0	18.86	18.97	18.78	18.46	18.57	18.38
	16QAM	RB1#0	19.07	18.90	18.99	18.67	18.50	18.59
		RB1#25	19.40	19.15	19.20	19.00	18.75	18.80
		RB1#49	19.19	18.87	18.96	18.79	18.47	18.56
		RB25#0	17.88	17.99	17.92	17.48	17.59	17.52
		RB25#25	17.94	18.04	17.77	17.54	17.64	17.37
		RB50#0	17.88	17.96	17.87	17.48	17.56	17.47

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	19.71	19.80	19.79	19.31	19.40	19.39
		RB1#38	19.87	19.91	19.86	19.47	19.51	19.46
		RB1#74	19.81	19.82	19.71	19.41	19.42	19.31
		RB36#0	18.89	18.94	18.88	18.49	18.54	18.48
		RB36#39	18.92	18.98	18.83	18.52	18.58	18.43
		RB75#0	18.88	18.94	18.83	18.48	18.54	18.43
	16QAM	RB1#0	18.92	18.78	19.02	18.52	18.38	18.62
		RB1#38	19.10	18.90	19.09	18.70	18.50	18.69
		RB1#74	19.03	18.78	18.95	18.63	18.38	18.55
		RB36#0	17.83	17.86	17.88	17.43	17.46	17.48
		RB36#39	18.02	17.91	17.85	17.62	17.51	17.45
		RB75#0	17.79	17.93	18.00	17.39	17.53	17.60
20.0	QPSK	RB1#0	19.52	19.58	19.68	19.12	19.18	19.28
		RB1#50	20.18	20.12	20.15	19.78	19.72	19.75
		RB1#99	19.66	19.62	19.60	19.26	19.22	19.2
		RB50#0	18.86	18.84	18.81	18.46	18.44	18.41
		RB50#50	18.94	18.93	18.72	18.54	18.53	18.32
		RB100#0	18.90	18.92	18.83	18.50	18.52	18.43
	16QAM	RB1#0	18.61	18.60	18.89	18.21	18.20	18.49
		RB1#50	19.28	19.14	19.37	18.88	18.74	18.97
		RB1#99	18.78	18.64	18.84	18.38	18.24	18.44
		RB50#0	17.82	17.91	17.81	17.42	17.51	17.41
		RB50#50	17.86	17.98	17.89	17.46	17.58	17.49
		RB100#0	17.91	17.92	17.80	17.51	17.52	17.40

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

For Band38: Antenna Gain = -0.4dBi

Limit: EIRP ≤ 33dBm

LTE Band 41

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	19.41	19.83	19.50	19.01	19.43	19.10
		RB1#13	19.51	19.93	19.59	19.11	19.53	19.19
		RB1#24	19.48	19.82	19.47	19.08	19.42	19.07
		RB15#0	18.45	18.86	18.55	18.05	18.46	18.15
		RB15#10	18.50	18.93	18.55	18.10	18.53	18.15
		RB25#0	18.49	18.93	18.56	18.09	18.53	18.16
	16QAM	RB1#0	18.53	19.11	18.50	18.13	18.71	18.10
		RB1#13	18.68	19.17	18.63	18.28	18.77	18.23
		RB1#24	18.56	19.12	18.50	18.16	18.72	18.10
		RB15#0	17.47	17.90	17.52	17.07	17.50	17.12
		RB15#10	17.56	17.92	17.48	17.16	17.52	17.08
		RB25#0	17.56	17.82	17.56	17.16	17.42	17.16
10.0	QPSK	RB1#0	19.52	19.88	19.64	19.12	19.48	19.24
		RB1#25	19.81	20.19	19.89	19.41	19.79	19.49
		RB1#49	19.57	19.93	19.56	19.17	19.53	19.16
		RB25#0	18.51	18.93	18.70	18.11	18.53	18.30
		RB25#25	18.58	19.00	18.63	18.18	18.60	18.23
		RB50#0	18.53	18.94	18.65	18.13	18.54	18.25
	16QAM	RB1#0	18.72	18.86	18.77	18.32	18.46	18.37
		RB1#25	19.05	19.14	19.03	18.65	18.74	18.63
		RB1#49	18.83	18.86	18.71	18.43	18.46	18.31
		RB25#0	17.50	17.95	17.74	17.10	17.55	17.34
		RB25#25	17.57	18.01	17.66	17.17	17.61	17.26
		RB50#0	17.54	17.96	17.67	17.14	17.56	17.27

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	19.40	19.78	19.58	19.00	19.38	19.18
		RB1#38	19.59	19.94	19.67	19.19	19.54	19.27
		RB1#74	19.49	19.78	19.50	19.09	19.38	19.10
		RB36#0	18.51	18.91	18.73	18.11	18.51	18.33
		RB36#39	18.62	18.92	18.64	18.22	18.52	18.24
		RB75#0	18.56	18.91	18.68	18.16	18.51	18.28
	16QAM	RB1#0	18.62	18.75	18.84	18.22	18.35	18.44
		RB1#38	18.80	18.89	18.91	18.40	18.49	18.51
		RB1#74	18.74	18.75	18.75	18.34	18.35	18.35
		RB36#0	17.48	17.85	17.73	17.08	17.45	17.33
		RB36#39	17.60	17.90	17.69	17.20	17.50	17.29
		RB75#0	17.51	17.95	17.70	17.11	17.55	17.30
20.0	QPSK	RB1#0	19.18	19.55	19.48	18.78	19.15	19.08
		RB1#50	19.83	20.13	19.98	19.43	19.73	19.58
		RB1#99	19.37	19.57	19.42	18.97	19.17	19.02
		RB50#0	18.41	18.88	18.71	18.01	18.48	18.31
		RB50#50	18.66	18.96	18.62	18.26	18.56	18.22
		RB100#0	18.56	18.90	18.68	18.16	18.50	18.28
	16QAM	RB1#0	18.32	18.59	18.73	17.92	18.19	18.33
		RB1#50	18.91	19.15	19.21	18.51	18.75	18.81
		RB1#99	18.50	18.61	18.64	18.10	18.21	18.24
		RB50#0	17.41	17.90	17.76	17.01	17.50	17.36
		RB50#50	17.66	17.99	17.62	17.26	17.59	17.22
		RB100#0	17.55	17.89	17.69	17.15	17.49	17.29

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

For Band41: Antenna Gain = -0.4dBi

Limit: EIRP ≤ 33dBm

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	16.07	16.26	16.12	15.37	15.56	15.42
		RB1#3	16.20	16.46	16.34	15.50	15.76	15.64
		RB1#5	16.08	16.24	16.12	15.38	15.54	15.42
		RB3#0	16.22	16.45	16.30	15.52	15.75	15.60
		RB3#3	16.21	16.51	16.34	15.51	15.81	15.64
		RB6#0	15.13	15.31	15.19	14.43	14.61	14.49
	16QAM	RB1#0	15.14	15.47	15.20	14.44	14.77	14.50
		RB1#3	15.31	15.64	15.42	14.61	14.94	14.72
		RB1#5	15.14	15.48	15.22	14.44	14.78	14.52
		RB3#0	15.46	15.49	15.41	14.76	14.79	14.71
		RB3#3	15.50	15.47	15.40	14.80	14.77	14.70
		RB6#0	14.23	14.46	14.18	13.53	13.76	13.48
3.0	QPSK	RB1#0	16.09	16.37	16.20	15.39	15.67	15.50
		RB1#8	16.09	16.33	16.19	15.39	15.63	15.49
		RB1#14	16.09	16.26	16.20	15.39	15.56	15.50
		RB6#0	15.11	15.33	15.19	14.41	14.63	14.49
		RB6#9	15.15	15.29	15.19	14.45	14.59	14.49
		RB15#0	15.21	15.40	15.28	14.51	14.70	14.58
	16QAM	RB1#0	15.83	15.59	15.35	15.13	14.89	14.65
		RB1#8	15.83	15.54	15.31	15.13	14.84	14.61
		RB1#14	15.88	15.56	15.25	15.18	14.86	14.55
		RB6#0	14.26	14.36	14.16	13.56	13.66	13.46
		RB6#9	14.24	14.39	14.15	13.54	13.69	13.45
		RB15#0	14.28	14.39	14.36	13.58	13.69	13.66

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	16.04	16.30	16.14	15.34	15.60	15.44
		RB1#13	16.23	16.37	16.23	15.53	15.67	15.53
		RB1#24	16.07	16.26	16.12	15.37	15.56	15.42
		RB15#0	15.12	15.39	15.24	14.42	14.69	14.54
		RB15#10	15.22	15.41	15.26	14.52	14.71	14.56
		RB25#0	15.15	15.39	15.23	14.45	14.69	14.53
	16QAM	RB1#0	14.98	15.65	15.27	14.28	14.95	14.57
		RB1#13	15.16	15.79	15.42	14.46	15.09	14.72
		RB1#24	15.05	15.66	15.26	14.35	14.96	14.56
		RB15#0	14.24	14.43	14.33	13.54	13.73	13.63
		RB15#10	14.33	14.42	14.30	13.63	13.72	13.60
		RB25#0	14.24	14.45	14.32	13.54	13.75	13.62
10.0	QPSK	RB1#0	16.08	16.38	16.21	15.38	15.68	15.51
		RB1#25	16.25	16.50	16.39	15.55	15.80	15.69
		RB1#49	16.21	16.31	16.17	15.51	15.61	15.47
		RB25#0	15.09	15.40	15.29	14.39	14.70	14.59
		RB25#25	15.36	15.48	15.29	14.66	14.78	14.59
		RB50#0	15.25	15.48	15.32	14.55	14.78	14.62
	16QAM	RB1#0	15.78	15.60	15.35	15.08	14.90	14.65
		RB1#25	16.03	15.72	15.47	15.33	15.02	14.77
		RB1#49	15.94	15.56	15.28	15.24	14.86	14.58
		RB25#0	14.21	14.49	14.41	13.51	13.79	13.71
		RB25#25	14.44	14.54	14.44	13.74	13.84	13.74
		RB50#0	14.28	14.52	14.37	13.58	13.82	13.67

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	15.98	16.29	16.10	15.28	15.59	15.40
		RB1#38	16.15	16.41	16.23	15.45	15.71	15.53
		RB1#74	16.10	16.23	16.07	15.40	15.53	15.37
		RB36#0	15.14	15.39	15.34	14.44	14.69	14.64
		RB36#39	15.32	15.41	15.28	14.62	14.71	14.58
		RB75#0	15.20	15.38	15.30	14.50	14.68	14.60
	16QAM	RB1#0	15.74	15.50	15.64	15.04	14.8	14.94
		RB1#38	15.98	15.57	15.71	15.28	14.87	15.01
		RB1#74	15.88	15.45	15.56	15.18	14.75	14.86
		RB36#0	14.13	14.40	14.35	13.43	13.70	13.65
		RB36#39	14.32	14.46	14.28	13.62	13.76	13.58
		RB75#0	14.25	14.44	14.32	13.55	13.74	13.62
20.0	QPSK	RB1#0	15.91	16.10	15.94	15.21	15.40	15.24
		RB1#50	16.36	16.54	16.38	15.66	15.84	15.68
		RB1#99	16.06	16.09	15.88	15.36	15.39	15.18
		RB50#0	15.12	15.43	15.46	14.42	14.73	14.76
		RB50#50	15.30	15.42	15.33	14.60	14.72	14.63
		RB100#0	15.18	15.44	15.40	14.48	14.74	14.70
	16QAM	RB1#0	15.23	15.44	15.63	14.53	14.74	14.93
		RB1#50	15.76	15.84	16.03	15.06	15.14	15.33
		RB1#99	15.39	15.39	15.58	14.69	14.69	14.88
		RB50#0	14.16	14.47	14.50	13.46	13.77	13.80
		RB50#50	14.35	14.46	14.35	13.65	13.76	13.65
		RB100#0	14.25	14.47	14.44	13.55	13.77	13.74

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

For Band 66: Antenna Gain = -0.7dBi

Limit: EIRP ≤ 30dBm

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

Mode	Channel	PAR (dB)	Limit (dB)
GSM	Low	3.64	13
	Middle	3.53	13
	High	3.42	13

Mode	Channel	PAR (dB)	Limit (dB)
EGPRS	Low	3.57	13
	Middle	3.42	13
	High	3.46	13

Mode	Channel	PAR (dB)	Limit (dB)
RMC (BPSK)	Low	4.98	13
	Middle	4.85	13
	High	4.82	13
HSDPA (16QAM)	Low	4.95	13
	Middle	5.02	13
	High	5.03	13
HSUPA (QPSK)	Low	4.86	13
	Middle	4.87	13
	High	4.95	13
HSPA+	Low	4.92	13
	Middle	4.94	13
	High	4.96	13

PCS Band

Mode	Channel	PAR (dB)	Limit (dB)
GSM	Low	3.57	13
	Middle	3.56	13
	High	3.52	13

Mode	Channel	PAR (dB)	Limit (dB)
EGPRS	Low	3.56	13
	Middle	3.55	13
	High	3.47	13

Mode	Channel	PAR (dB)	Limit (dB)
RMC (BPSK)	Low	4.87	13
	Middle	4.84	13
	High	4.86	13
HSDPA (16QAM)	Low	4.97	13
	Middle	4.95	13
	High	4.85	13
HSUPA (QPSK)	Low	4.83	13
	Middle	4.86	13
	High	4.87	13
HSPA+	Low	4.82	13
	Middle	4.94	13
	High	4.96	13

AWS Band

Mode	Channel	PAR (dB)	Limit (dB)
RMC (BPSK)	Low	4.85	13
	Middle	4.87	13
	High	4.97	13
HSDPA (16QAM)	Low	4.92	13
	Middle	4.96	13
	High	4.95	13
HSUPA (QPSK)	Low	4.96	13
	Middle	4.94	13
	High	4.92	13
HSPA+	Low	4.94	13
	Middle	4.82	13
	High	4.84	13

LTE Band 2 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	7.25	7.26	7.19	13	Pass
QPSK (100RB Size)	6.54	6.66	6.29	13	Pass
16QAM (1RB Size)	5.25	5.17	5.36	13	Pass
16QAM (100RB Size)	4.76	4.85	4.93	13	Pass

LTE Band 4 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	3.36	3.95	3.75	13	Pass
QPSK (100RB Size)	5.16	6.35	5.38	13	Pass
16QAM (1RB Size)	4.29	4.65	4.78	13	Pass
16QAM (100RB Size)	5.72	6.27	6.88	13	Pass

LTE Band 5 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	7.37	6.91	8.75	13	Pass
QPSK (50RB Size)	5.16	5.35	8.36	13	Pass
16QAM (1RB Size)	4.29	6.85	5.72	13	Pass
16QAM (50RB Size)	7.13	6.89	7.77	13	Pass

LTE Band 7 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	3.37	3.91	3.75	13	Pass
QPSK (100RB Size)	5.16	5.35	5.32	13	Pass
16QAM (1RB Size)	4.29	4.65	4.78	13	Pass
16QAM (100RB Size)	5.99	6.22	6.15	13	Pass

LTE Band 12 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	8.15	8.75	8.76	13	Pass
QPSK (50RB Size)	9.12	9.14	9.55	13	Pass
16QAM (1RB Size)	10.10	10.26	10.38	13	Pass
16QAM (50RB Size)	9.85	9.62	9.64	13	Pass

LTE Band 17 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	8.70	8.56	8.12	13	Pass
QPSK (50RB Size)	8.69	8.55	8.46	13	Pass
16QAM (1RB Size)	9.54	9.36	9.45	13	Pass
16QAM (50RB Size)	9.36	9.78	9.77	13	Pass

LTE Band 38 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	10.49	10.51	10.07	13	Pass
QPSK (100RB Size)	8.65	8.67	7.38	13	Pass
16QAM (1RB Size)	7.16	6.41	5.07	13	Pass
16QAM (100RB Size)	8.64	8.86	8.58	13	Pass

LTE Band 41 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	10.12	10.33	10.28	13	Pass
QPSK (100RB Size)	10.25	10.24	10.36	13	Pass
16QAM (1RB Size)	8.69	8.26	8.14	13	Pass
16QAM (100RB Size)	9.64	9.55	9.42	13	Pass

LTE Band 66 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	7.77	7.56	7.88	13	Pass
QPSK (100RB Size)	6.98	6.92	6.54	13	Pass
16QAM (1RB Size)	7.52	7.32	7.46	13	Pass
16QAM (100RB Size)	7.48	7.55	7.69	13	Pass

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

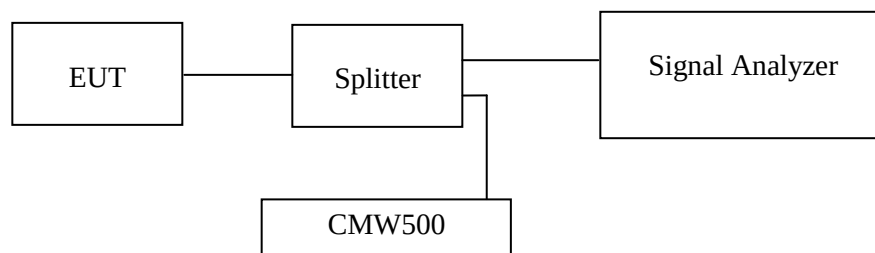
Applicable Standard

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.



Test Data

Environmental Conditions

Temperature:	25~28 °C
Relative Humidity:	52.1~56.2 %
ATM Pressure:	101.0 kPa

The testing was performed by Key Pei from 2022-03-12 to 2022-04-01.

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)
GSM (GMSK)	128	824.2	244.6	316.9
	190	836.6	244.6	318.4
	251	848.8	244.6	322.7
EGPRS(8PSK)	128	824.2	248.9	316.9
	190	836.6	247.5	321.3
	251	848.8	246.0	322.7

	Frequency (MHz)	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
RMC	826.4	4.16	4.71
	836.6	4.18	4.72
	846.6	4.18	4.71
HSDPA	826.4	4.20	4.85
	836.6	4.20	4.73
	846.6	4.20	4.81
HSUPA	826.4	4.18	4.72
	836.6	4.18	4.74
	846.6	4.18	4.72

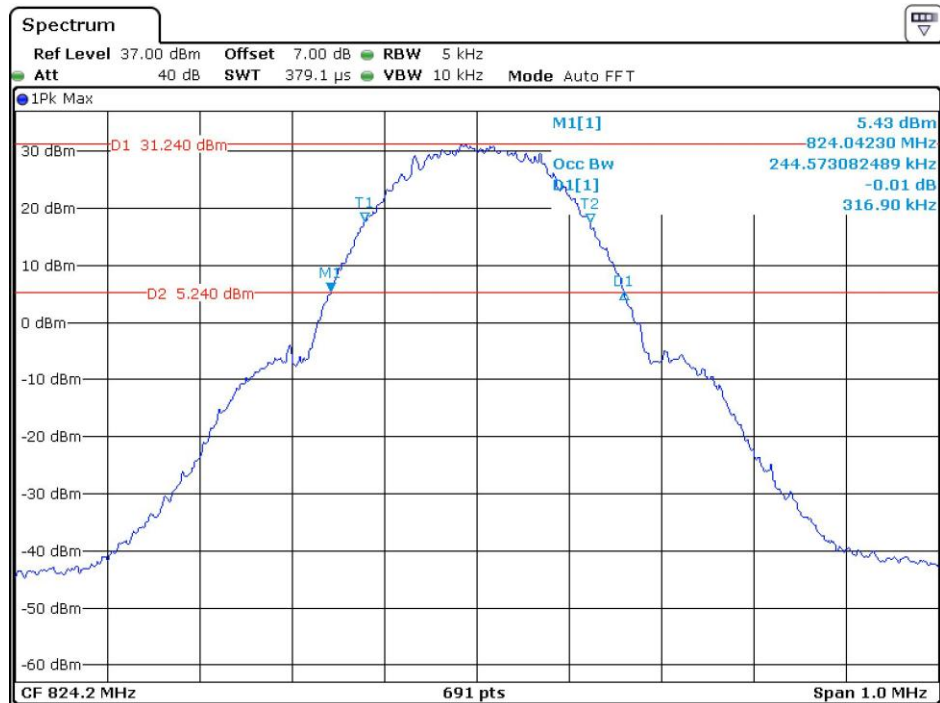
PCS Band (Part 24E)

Mode	Channel	Frequency (MHz)	99% Occupied Bandwidth (kHz)	26 dB Emission Bandwidth (kHz)
GSM (GMSK)	512	1850.2	244.6	316.9
	661	1880.0	244.6	311.1
	810	1909.8	244.6	314.0
EGPRS(8PSK)	512	1850.2	247.5	318.4
	661	1880.0	247.5	322.7
	810	1909.8	250.4	318.4

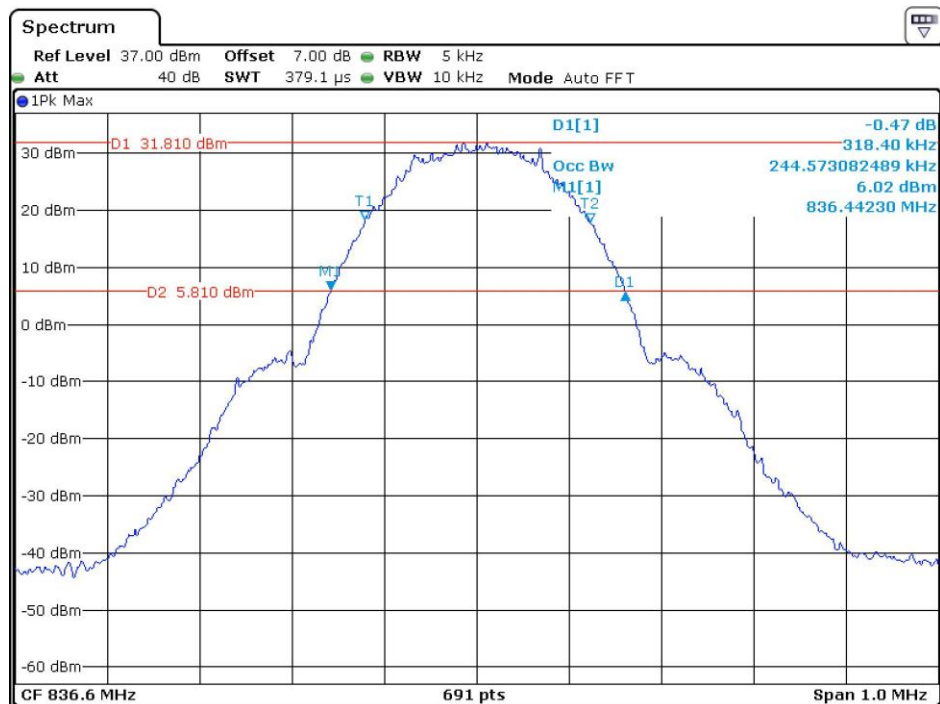
Frequency (MHz)		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
RMC	1852.4	4.17	4.71
	1880.0	4.18	4.71
	1907.6	4.18	4.73
HSDPA	1852.4	4.28	6.48
	1880.0	4.24	5.96
	1907.6	4.19	4.71
HSUPA	1852.4	4.20	4.72
	1880.0	4.19	4.71
	1907.6	4.20	4.73

AWS Band (Part 27)

Frequency (MHz)		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
RMC	1712.4	4.18	4.71
	1732.6	4.18	4.71
	1752.6	4.18	4.72
HSDPA	1712.4	4.18	4.73
	1732.6	4.18	4.72
	1752.6	4.20	4.74
HSUPA	1712.4	4.18	4.72
	1732.6	4.18	4.72
	1752.6	4.19	4.71

Cellular Band (Part 22H)**26 dB Emissions & 99% Occupied Bandwidth for GSM (GMSK) Mode, Low channel**

Date: 1.APR.2022 22:21:42

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

Date: 1.APR.2022 22:23:27

Spectrum

Ref Level 37.00 dBm Offset 7.00 dB RBW 5 kHz
Att 40 dB SWT 379.1 μ s VBW 10 kHz Mode Auto FFT

1Pk Max

The spectrum plot displays a signal with a peak at 31.060 dBm. The plot includes several markers and levels: D1 at 31.060 dBm, D2 at 5.060 dBm, and D1[1] at -0.18 dB. The signal is centered at 848.8 MHz with a span of 1.0 MHz. The plot also shows the occupied bandwidth (Occ Bw) and the maximum level (M1[1]).

30 dBm D1 31.060 dBm

20 dBm

10 dBm

0 dBm

-10 dBm

-20 dBm

-30 dBm

-40 dBm

-50 dBm

-60 dBm

D1[1] -0.18 dB

Occ Bw 322.70 kHz

M1[1] 244.573082489 kHz

T1 5.26 dBm

T2 848.63940 MHz

D1 848.8 MHz

D2 5.060 dBm

CF 848.8 MHz

691 pts

Span 1.0 MHz

Spectrum

Ref Level 37.00 dBm Offset 7.00 dB RBW 5 kHz
Att 40 dB SWT 379.1 μ s VBW 10 kHz Mode Auto FFT

1Pk Max

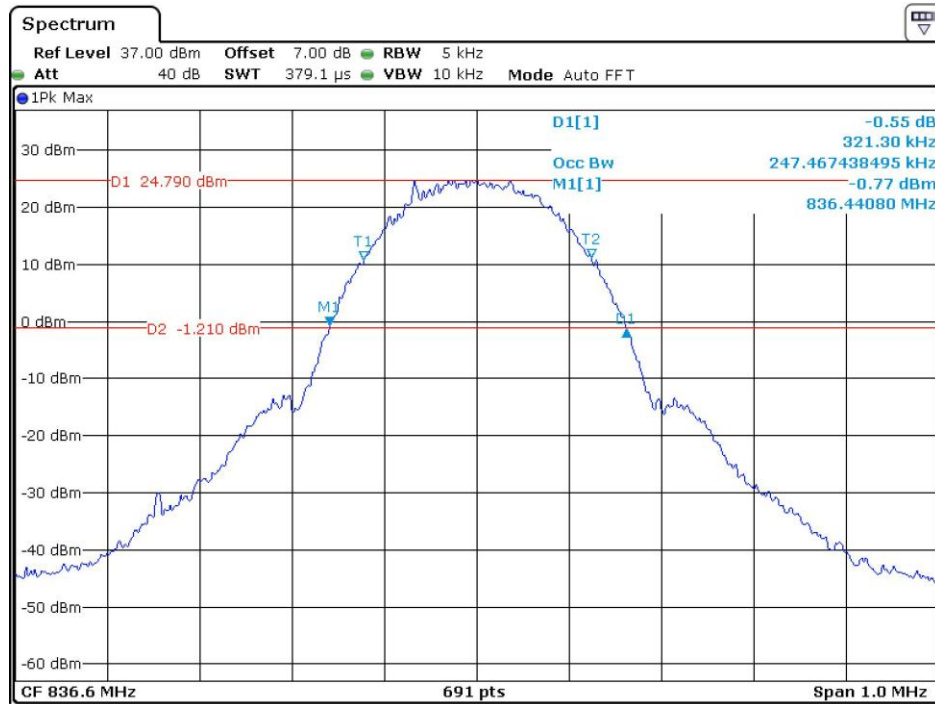
The spectrum plot displays a signal with a peak at 824.2 MHz. The y-axis represents power in dBm, ranging from -60 to 30. The x-axis represents frequency in MHz, with a span of 1.0 MHz. The plot includes several measurement points and levels:

- D1** 25.810 dBm
- D2** -0.190 dBm
- D1[1]** -0.94 dB
- Occ Bw** 316.90 kHz
- M1[1]** 248.914616498 kHz
- M1** -0.11 dBm
- T1**
- T2**
- P1**

CF 824.2 MHz 691 pts Span 1.0 MHz

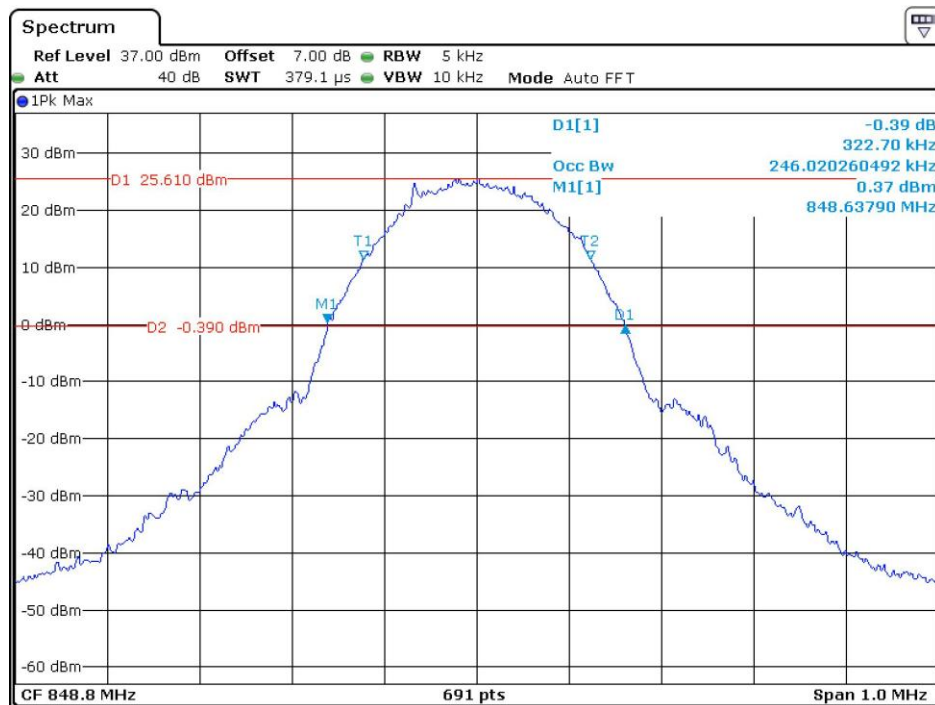
FCC -2G,3G,4G

26 dB Emissions & 99% Occupied Bandwidth for EGPRS (8PSK) Mode, Middle channel



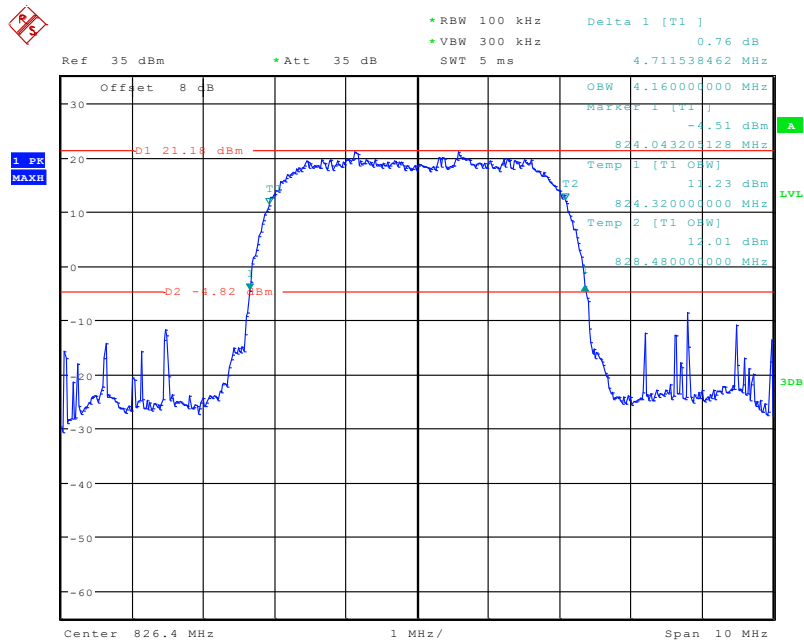
Date: 1.APR.2022 22:30:10

26 dB Emissions & 99% Occupied Bandwidth for EGPRS (8PSK) Mode, High channel



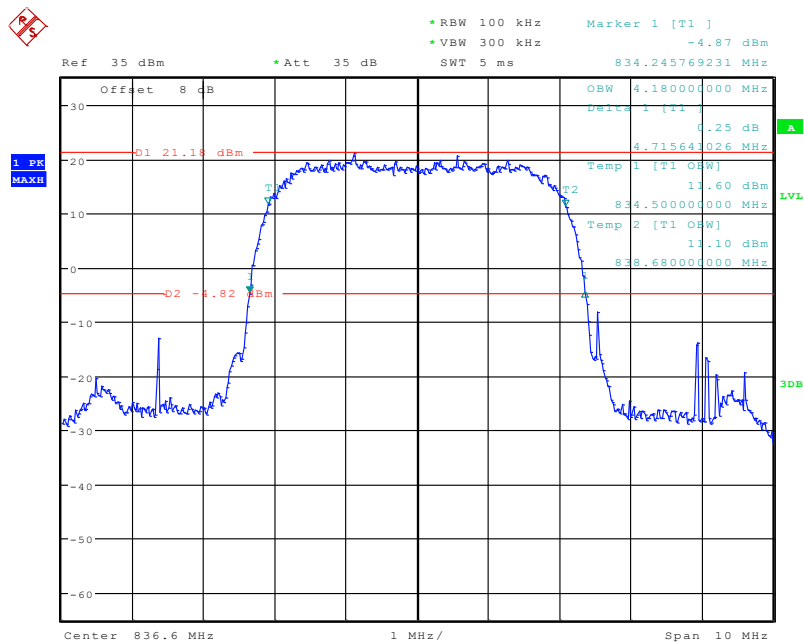
Date: 1.APR.2022 22:28:24

26 dB Emissions & 99% Occupied Bandwidth for RMC (BPSK) Mode, Low channel

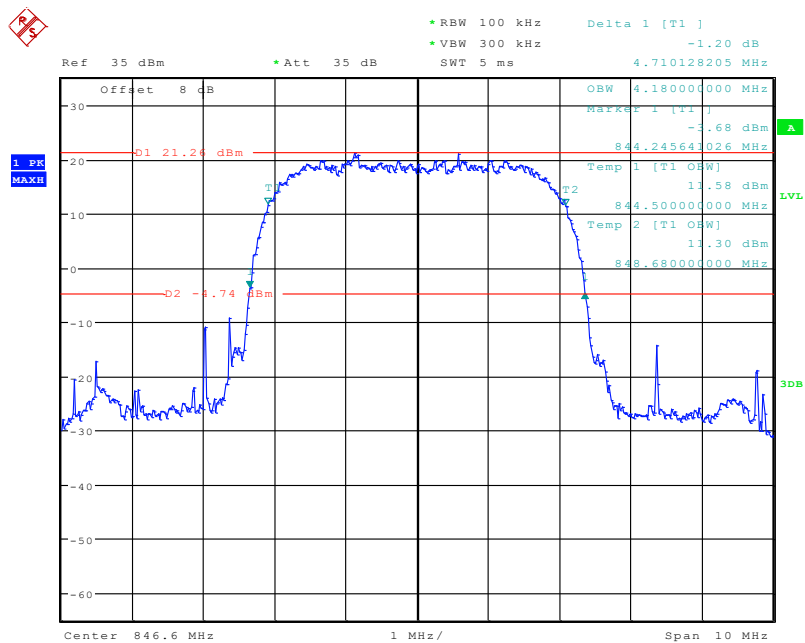


Date: 25.MAR.2022 09:21:30

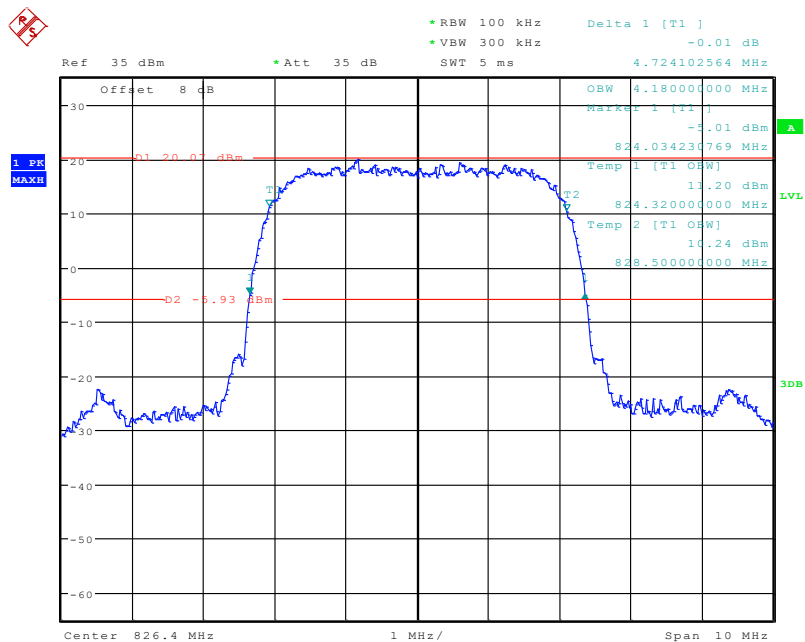
26 dB Emissions & 99% Occupied Bandwidth for RMC (BPSK) Mode, Middle channel



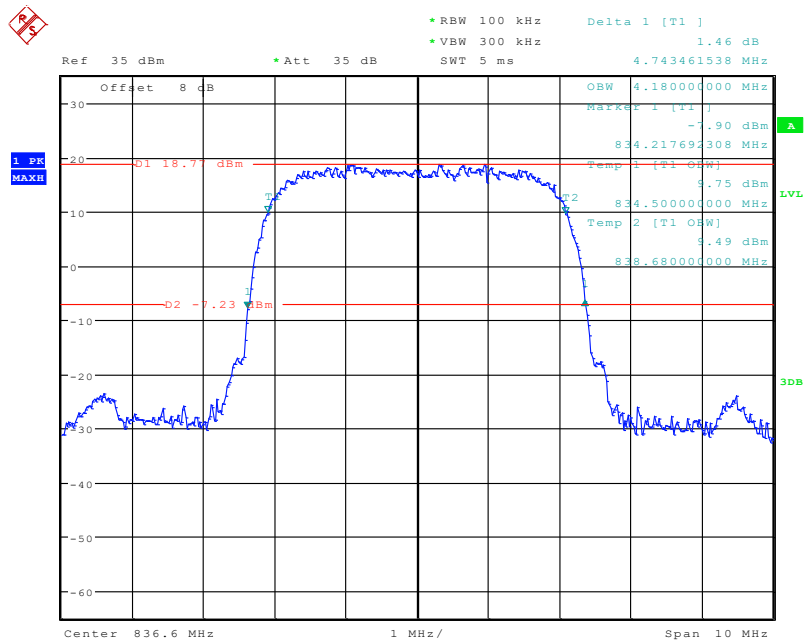
Date: 25.MAR.2022 09:22:54

26 dB Emissions & 99% Occupied Bandwidth for RMC (BPSK) Mode, High channel

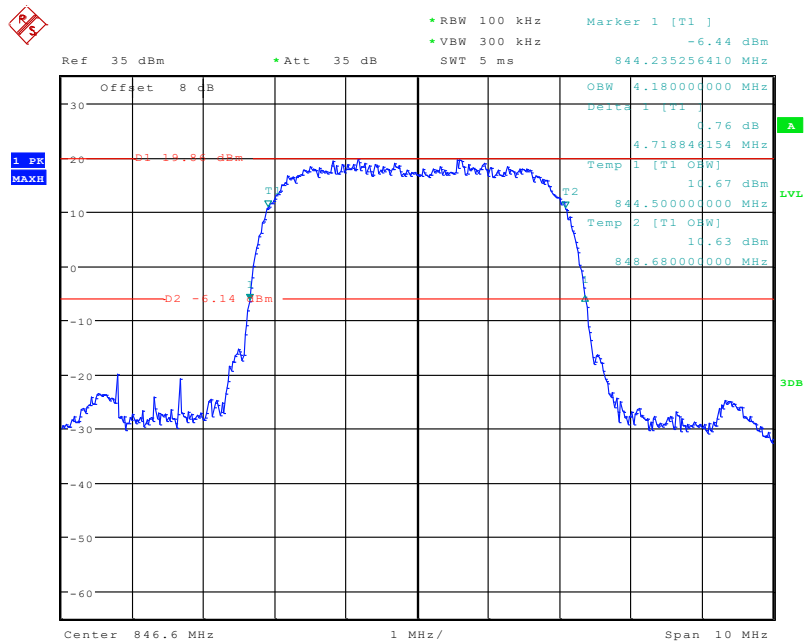
Date: 25.MAR.2022 09:23:55

26 dB Emissions & 99% Occupied Bandwidth for HSUPA (QPSK) Mode, Low channel

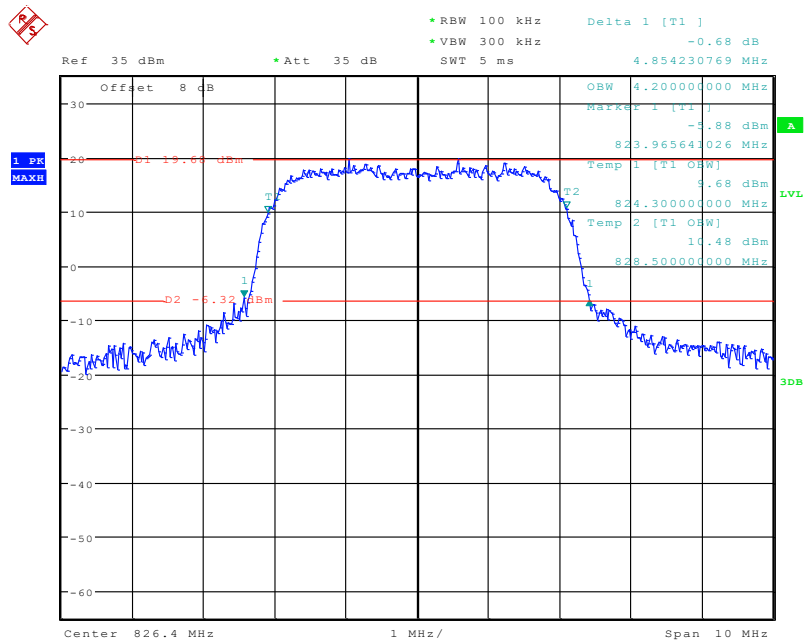
Date: 25.MAR.2022 10:21:46

26 dB Emissions & 99% Occupied Bandwidth for HSUPA (QPSK) Mode, Middle channel

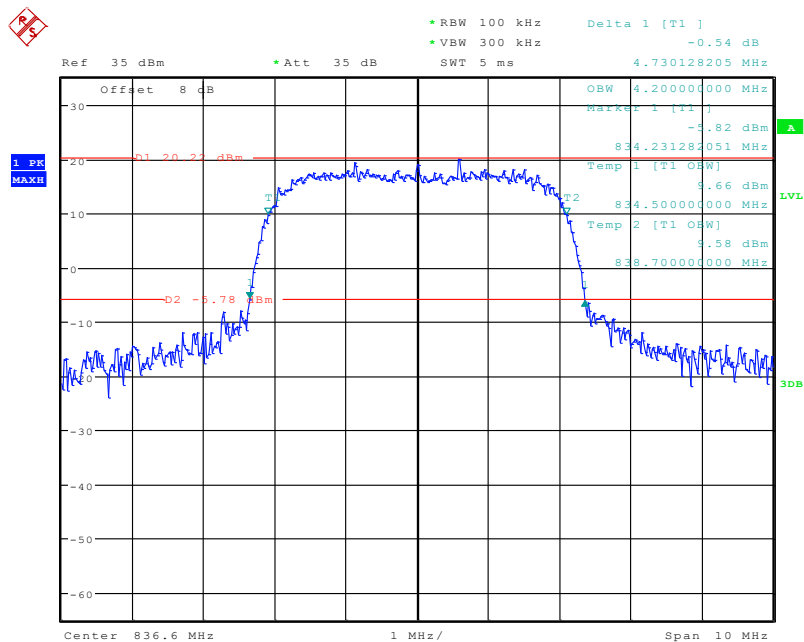
Date: 25.MAR.2022 10:23:04

26 dB Emissions & 99% Occupied Bandwidth for HSUPA (QPSK) Mode, High channel

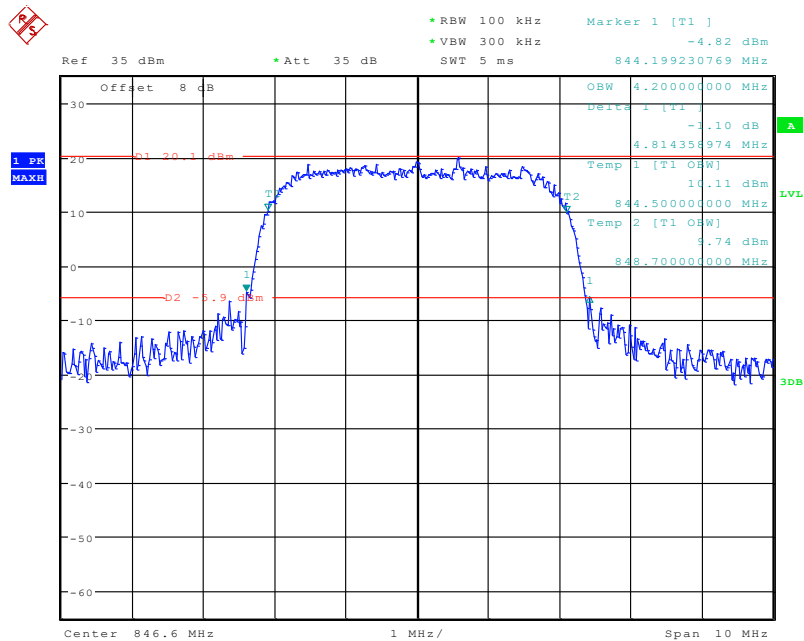
Date: 25.MAR.2022 10:24:07

26 dB Emissions & 99% Occupied Bandwidth for HSDPA (16QAM) Mode, Low channel

Date: 25.MAR.2022 10:07:24

26 dB Emissions & 99% Occupied Bandwidth for HSDPA (16QAM) Mode, Middle channel

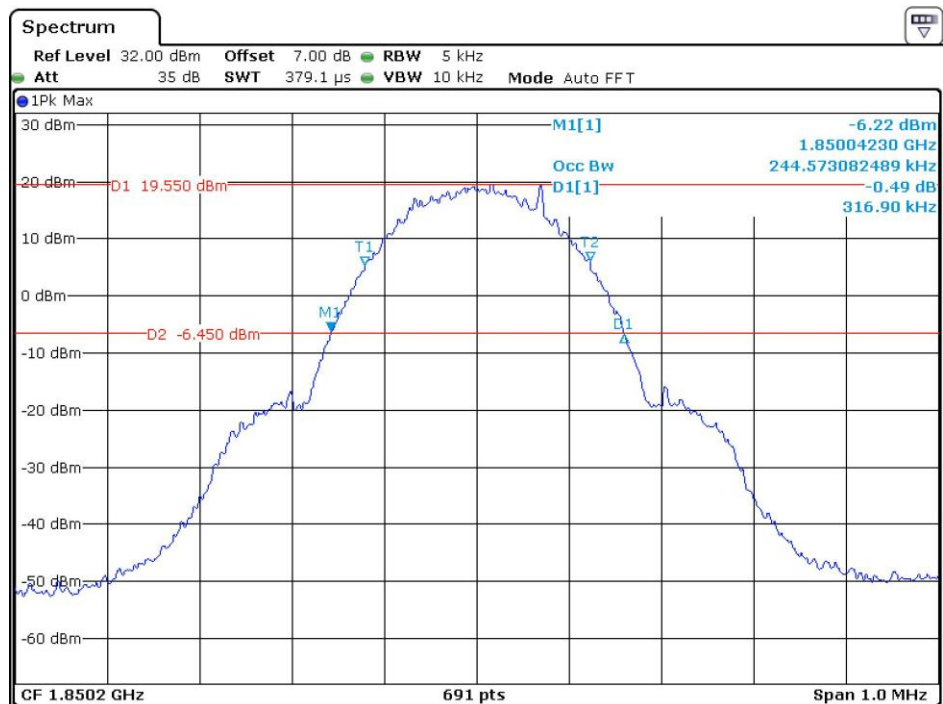
Date: 25.MAR.2022 10:08:37

26 dB Emissions & 99% Occupied Bandwidth for HSDPA (16QAM) Mode, High channel

Date: 25.MAR.2022 10:09:58

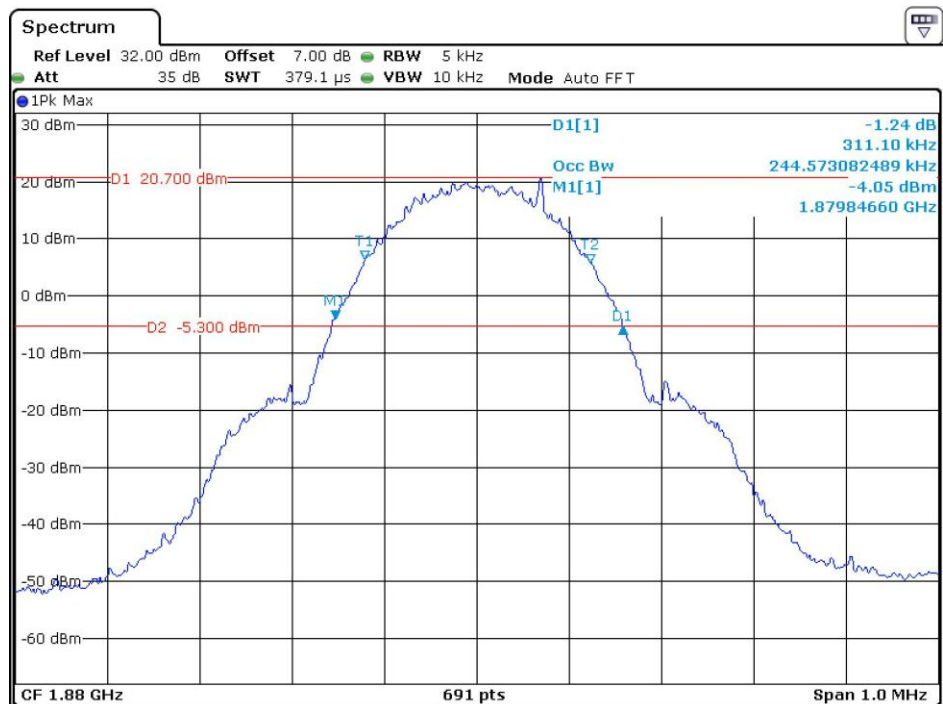
PCS Band (Part 24E)

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

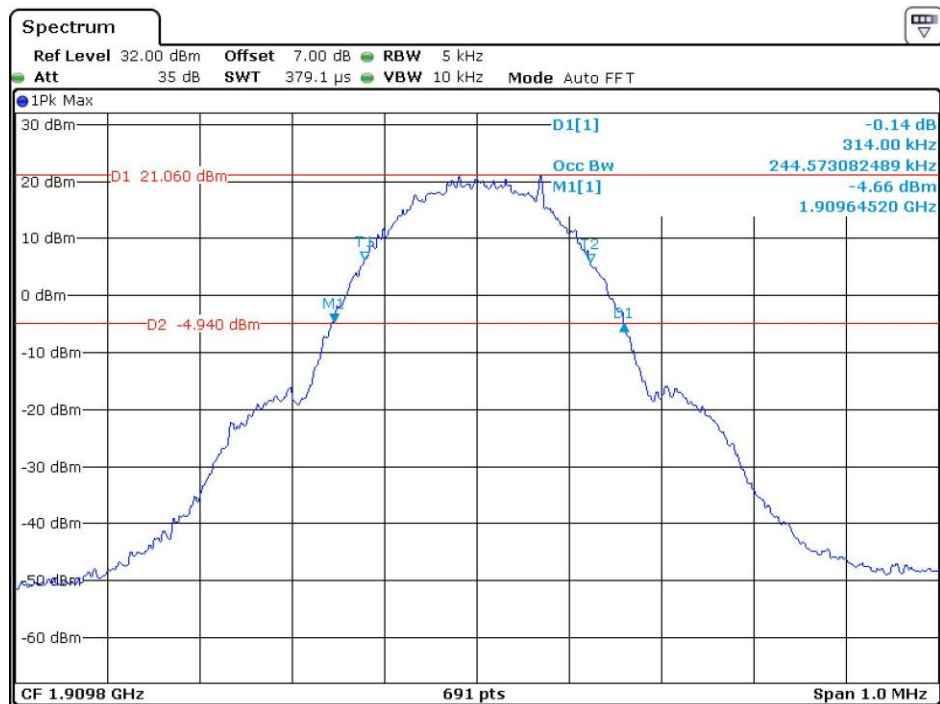


Date: 1.APR.2022 22:13:24

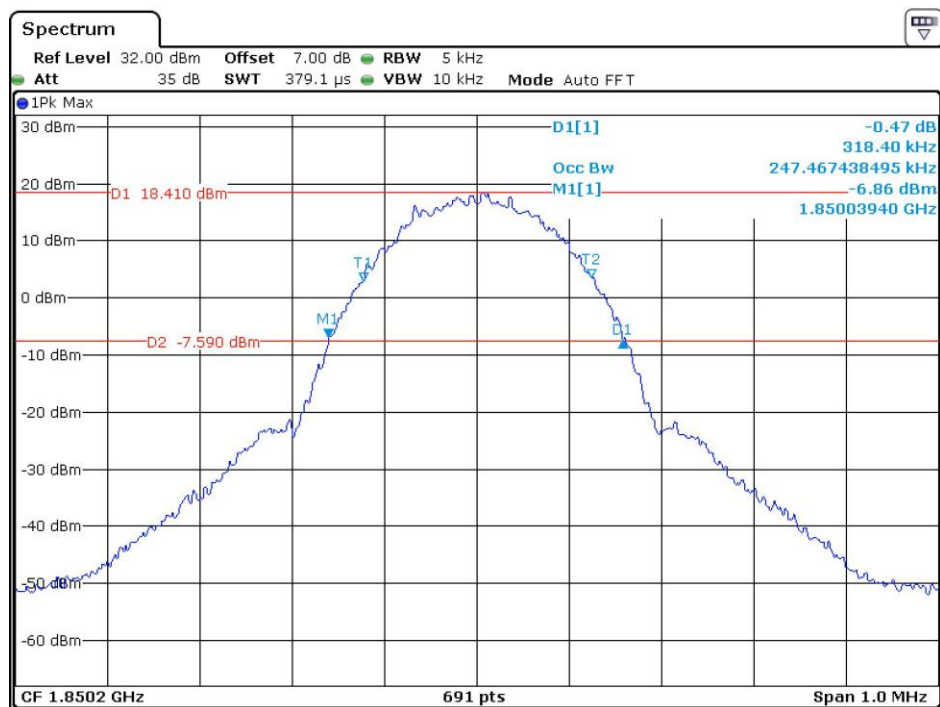
26 dB Emissions & 99% Occupied Bandwidth for GSM (GMSK) Mode, Middle channel



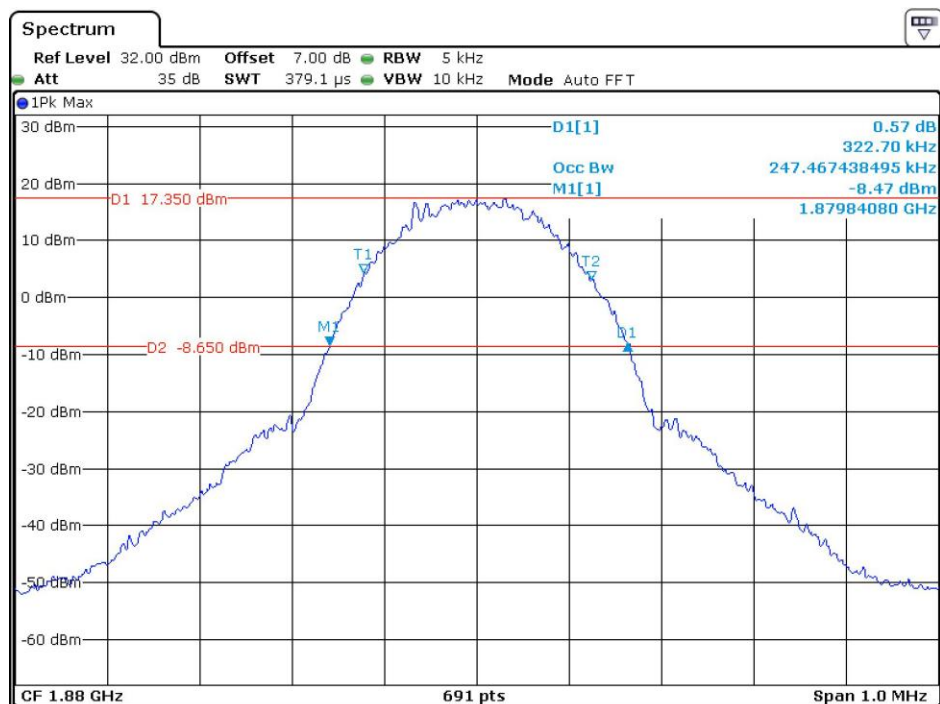
Date: 1.APR.2022 22:15:17

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

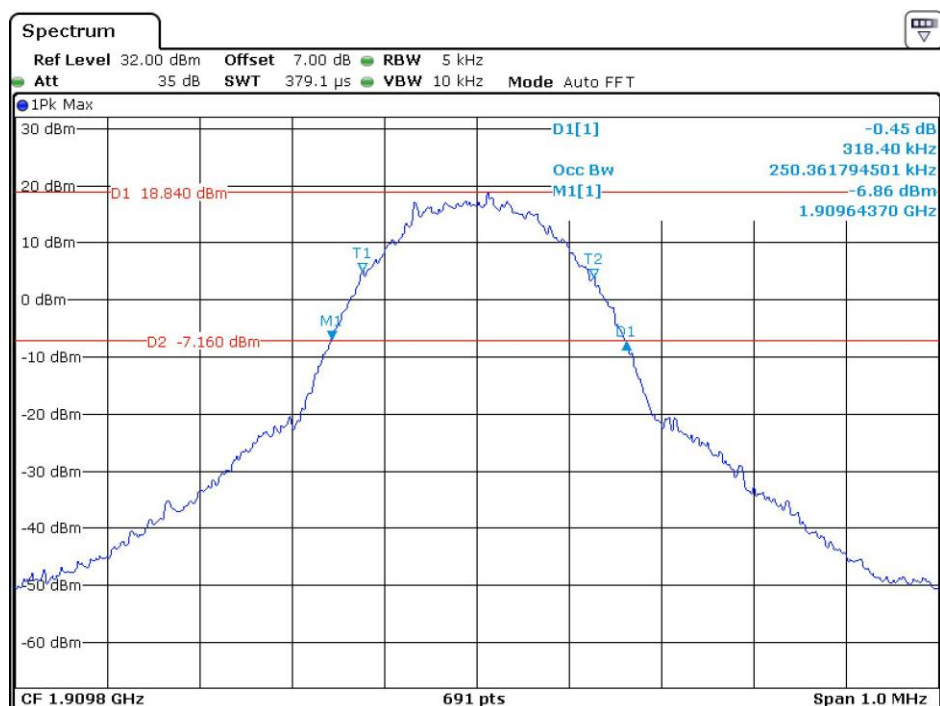
Date: 1.APR.2022 22:16:52

26 dB Emissions & 99% Occupied Bandwidth for EGPRS (8PSK) Mode, Low channel

Date: 1.APR.2022 22:39:47

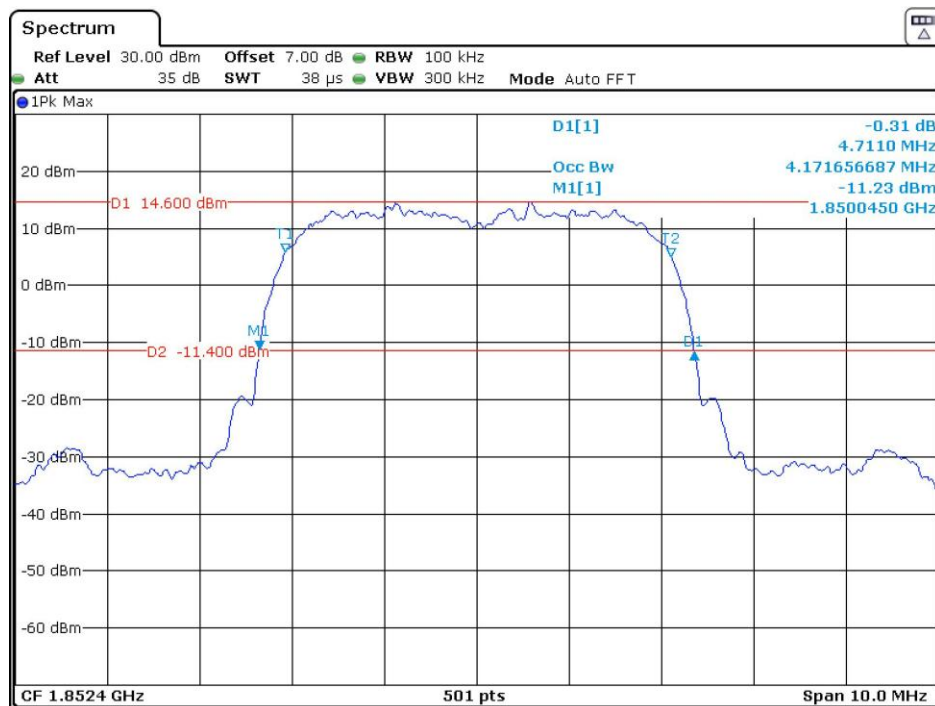
26 dB Emissions & 99% Occupied Bandwidth for EGPRS (8PSK) Mode, Middle channel

Date: 1.APR.2022 22:40:36

26 dB Emissions & 99% Occupied Bandwidth for EGPRS (8PSK) Mode, High channel

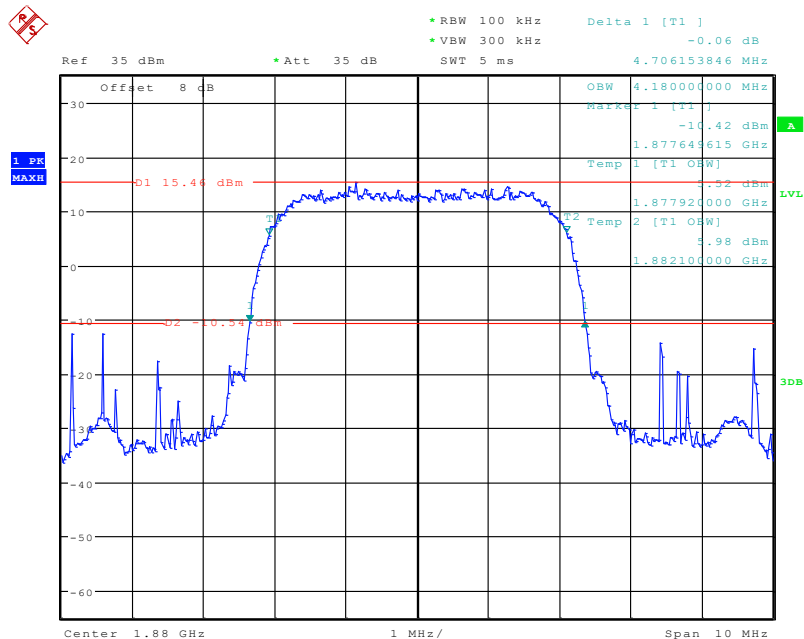
Date: 1.APR.2022 22:42:05

26 dB Emissions & 99% Occupied Bandwidth for RMC (BPSK) Mode, Low channel

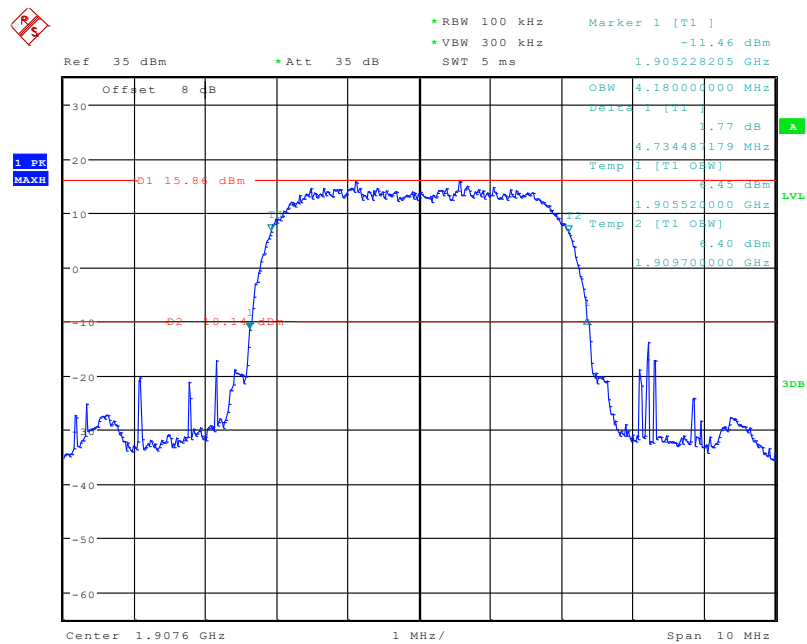


Date: 30.MAR.2022 11:29:28

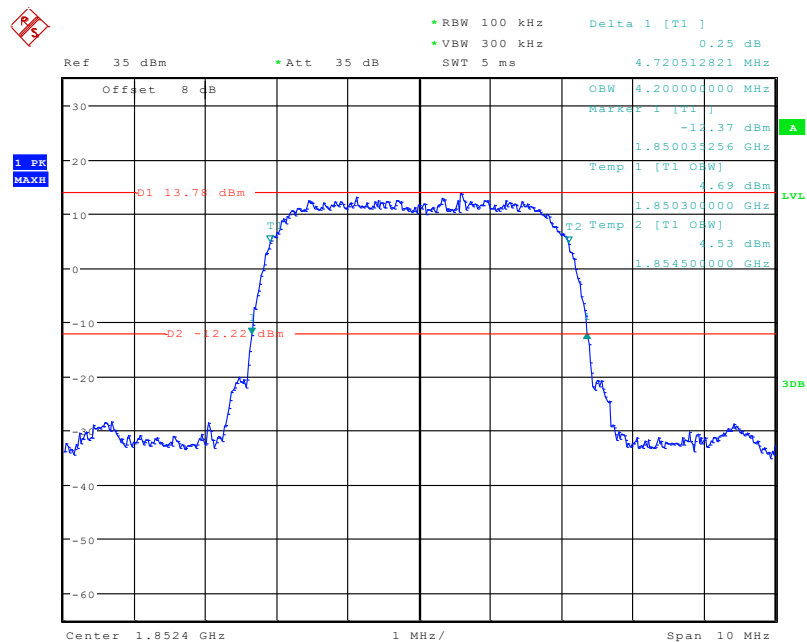
26 dB Emissions & 99% Occupied Bandwidth for RMC (BPSK) Mode, Middle channel



Date: 25.MAR.2022 09:15:21

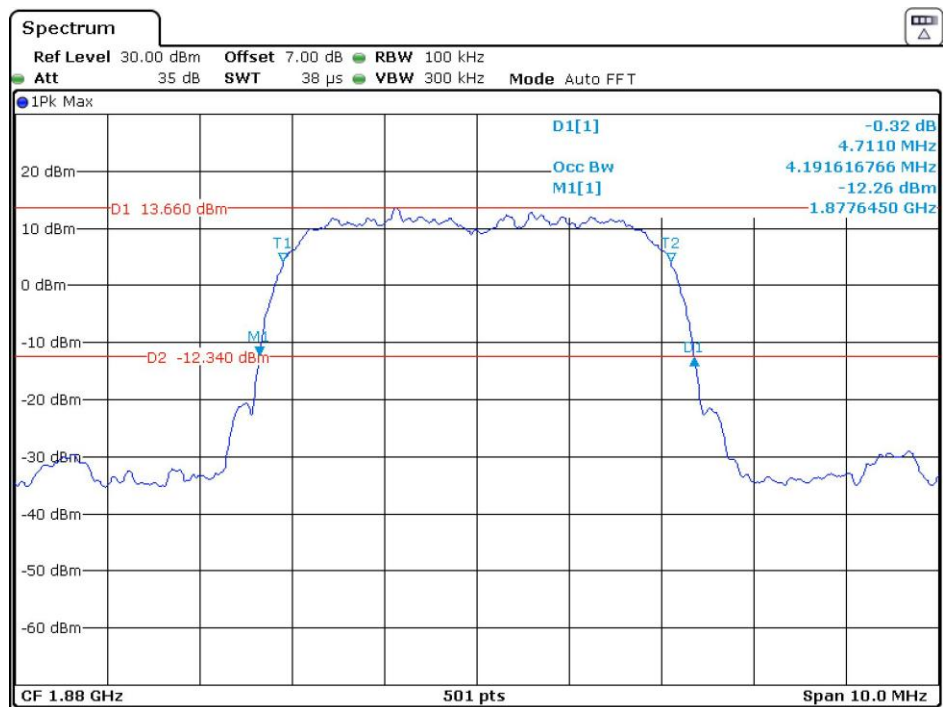
26 dB Emissions & 99% Occupied Bandwidth for RMC (BPSK) Mode, High channel

Date: 25.MAR.2022 09:16:28

26 dB Emissions & 99% Occupied Bandwidth for HSUPA (QPSK) Mode, Low channel

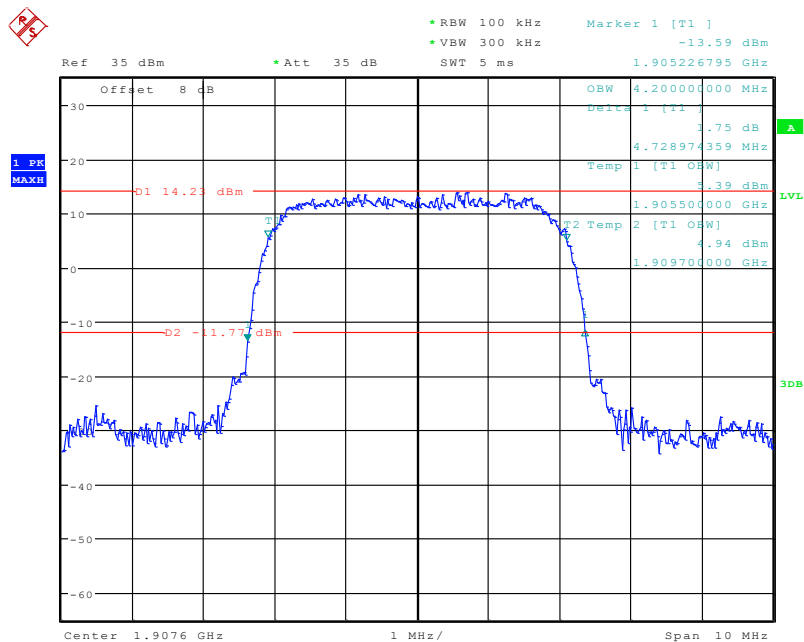
Date: 25.MAR.2022 10:12:58

26 dB Emissions & 99% Occupied Bandwidth for HSUPA (BPSK) Mode, Middle channel

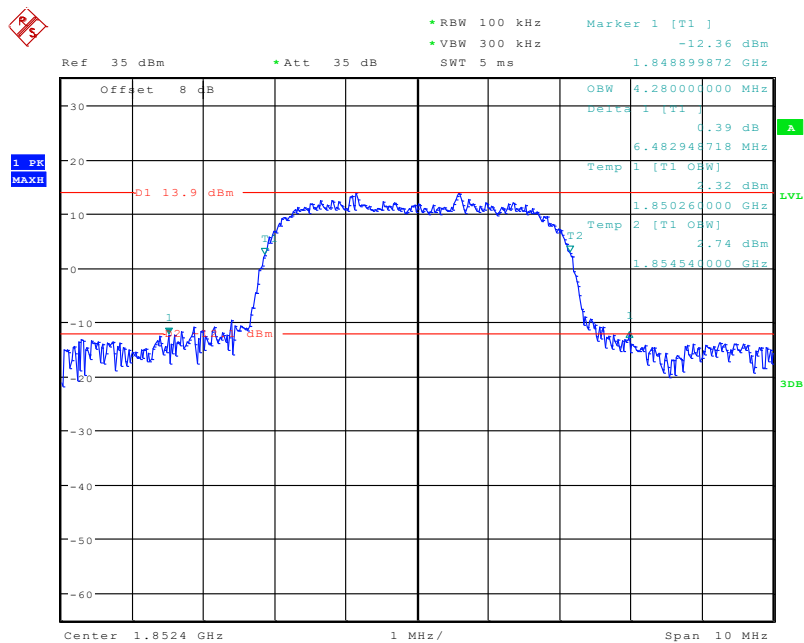


Date: 30.MAR.2022 11:41:04

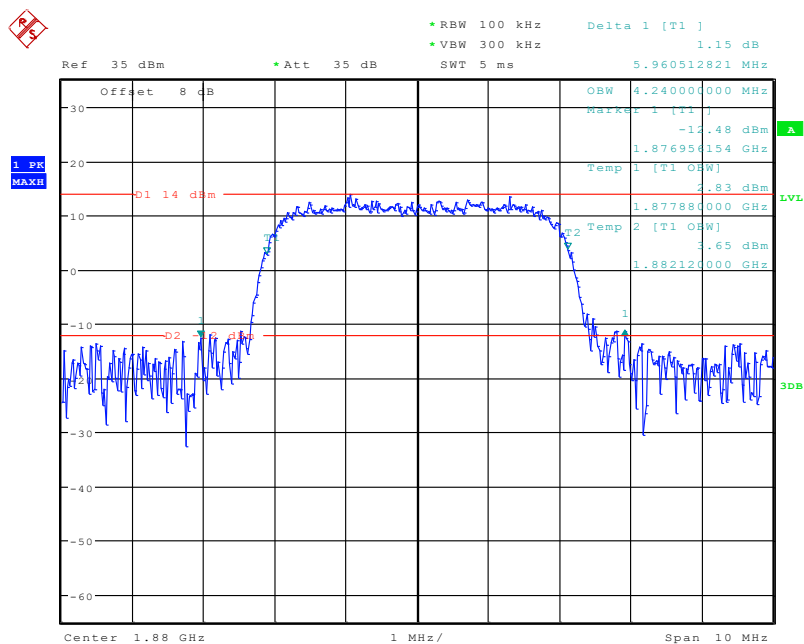
26 dB Emissions & 99% Occupied Bandwidth for HSUPA (BPSK) Mode, High channel



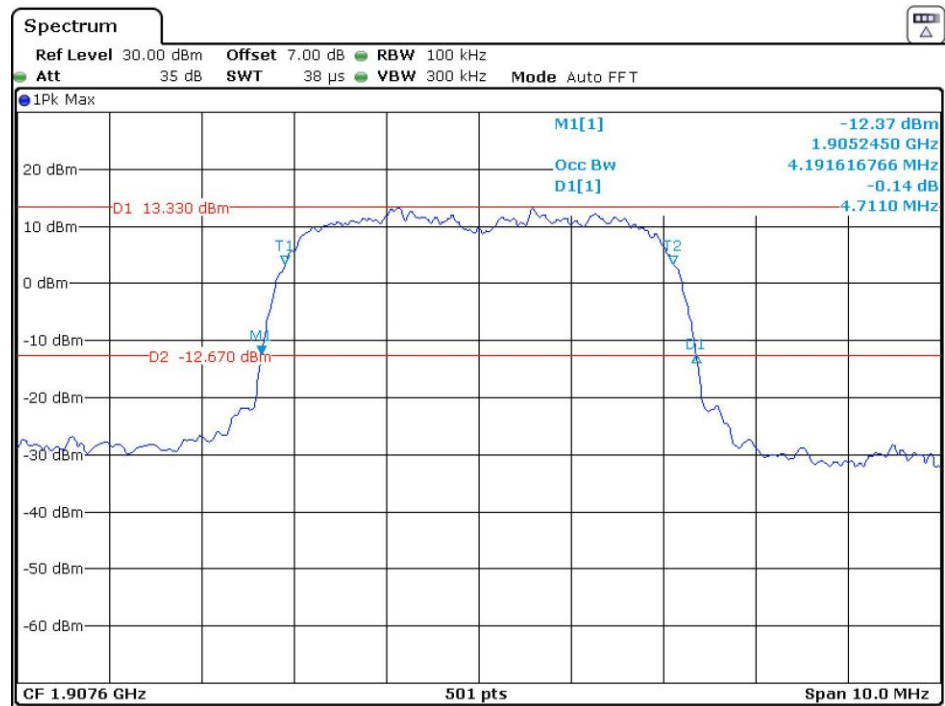
Date: 25.MAR.2022 10:15:41

26 dB Emissions & 99% Occupied Bandwidth for HSDPA (16QAM) Mode, Low channel

Date: 25.MAR.2022 09:57:44

26 dB Emissions & 99% Occupied Bandwidth for HSDPA (16QAM) Mode, Middle channel

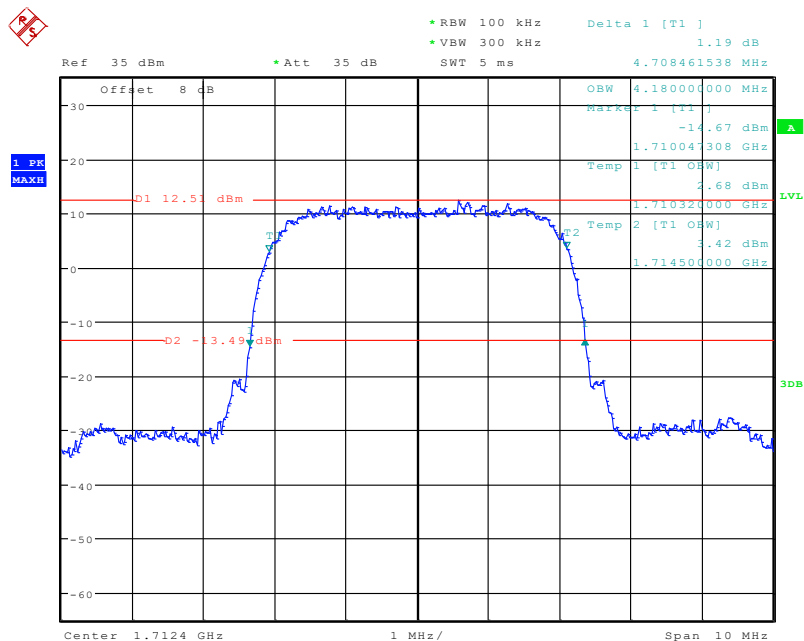
Date: 25.MAR.2022 09:58:56

26 dB Emissions & 99% Occupied Bandwidth for HSDPA (16QAM) Mode, High channel

Date: 30.MAR.2022 11:36:44

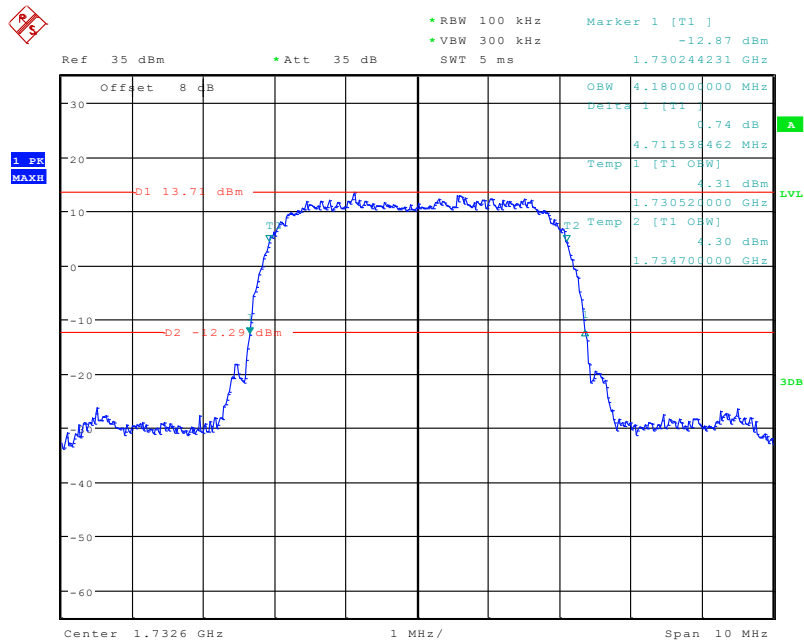
AWS Band (Part 27)

26 dB Emissions & 99% Occupied Bandwidth for RMC (BPSK) Mode, Low channel

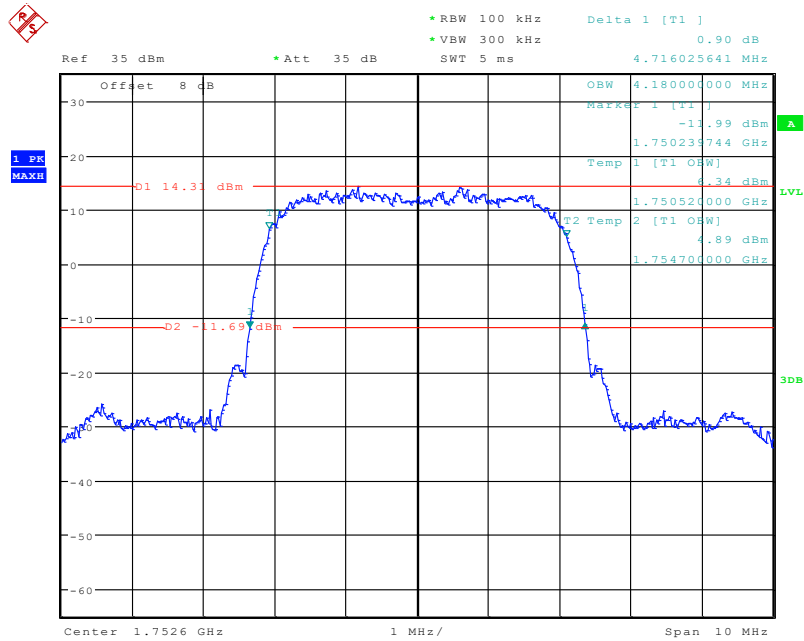


Date: 25.MAR.2022 09:18:06

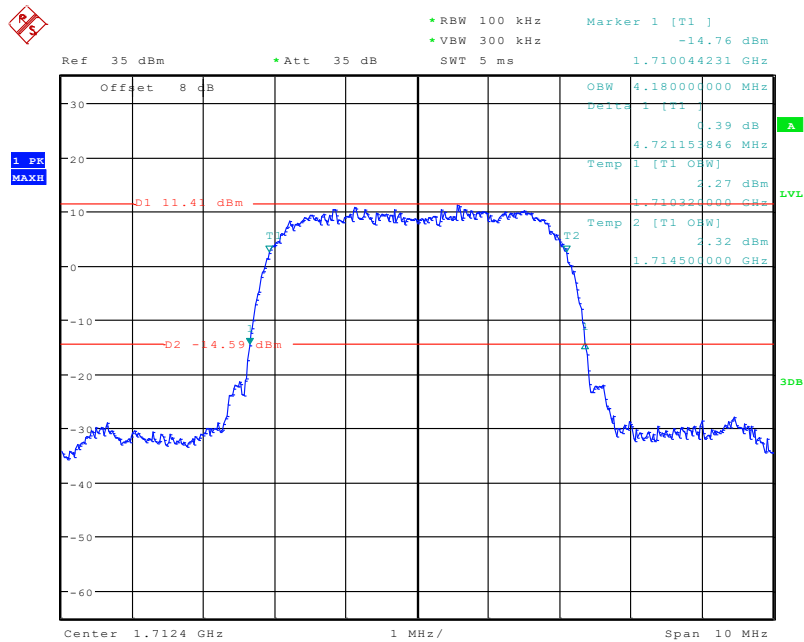
26 dB Emissions & 99% Occupied Bandwidth for RMC (BPSK) Mode, Middle channel



Date: 25.MAR.2022 09:19:17

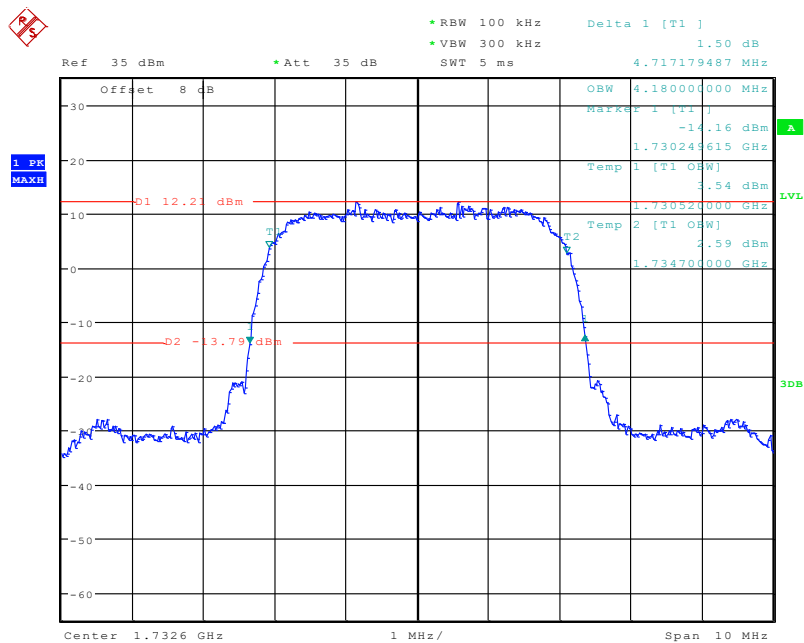
26 dB Emissions & 99% Occupied Bandwidth for RMC (BPSK) Mode, High channel

Date: 25.MAR.2022 09:20:10

26 dB Emissions & 99% Occupied Bandwidth for HSUPA (QPSK) Mode, Low channel

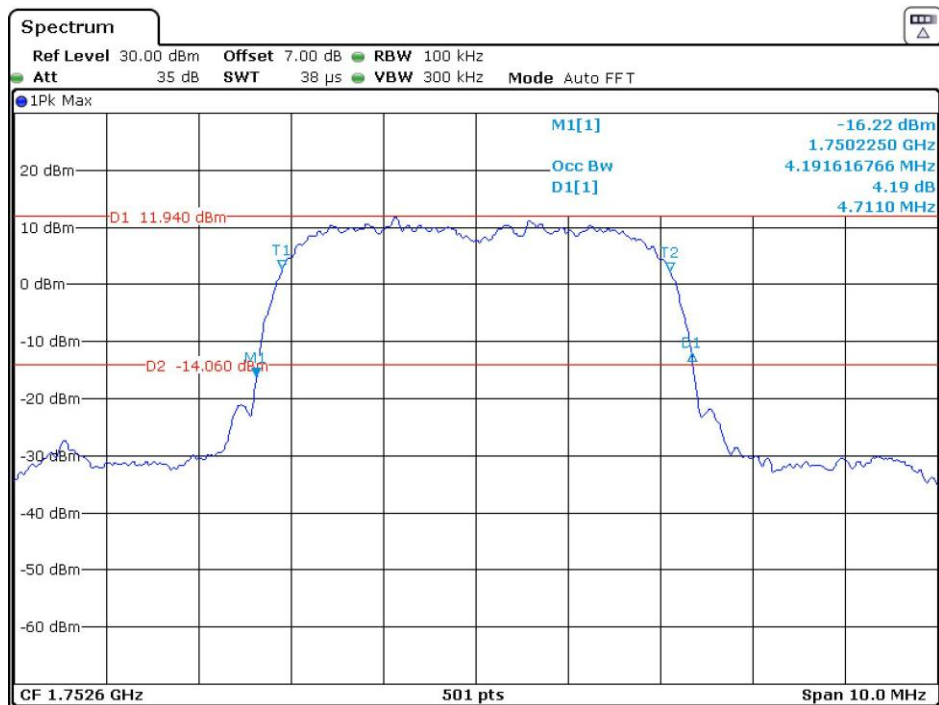
Date: 25.MAR.2022 10:19:04

26 dB Emissions & 99% Occupied Bandwidth for HSUPA (BPSK) Mode, Middle channel

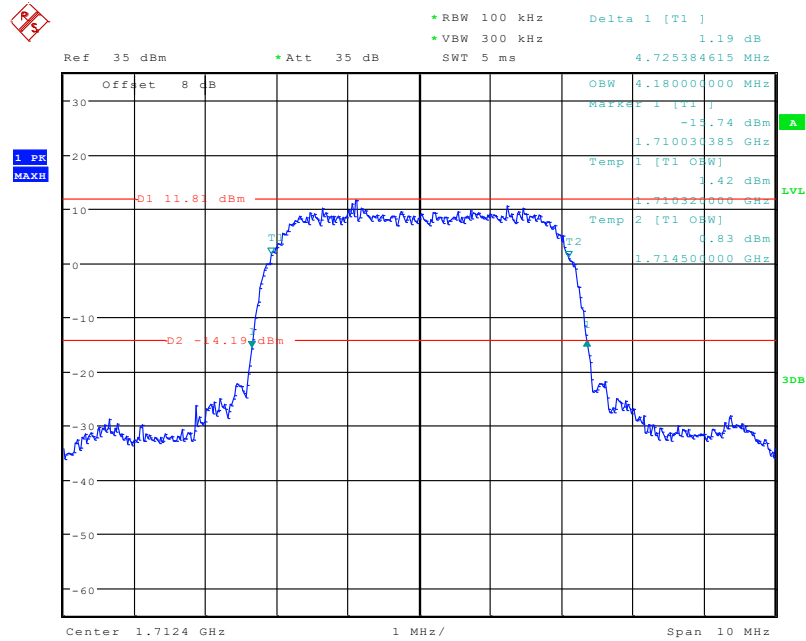


Date: 25.MAR.2022 10:17:39

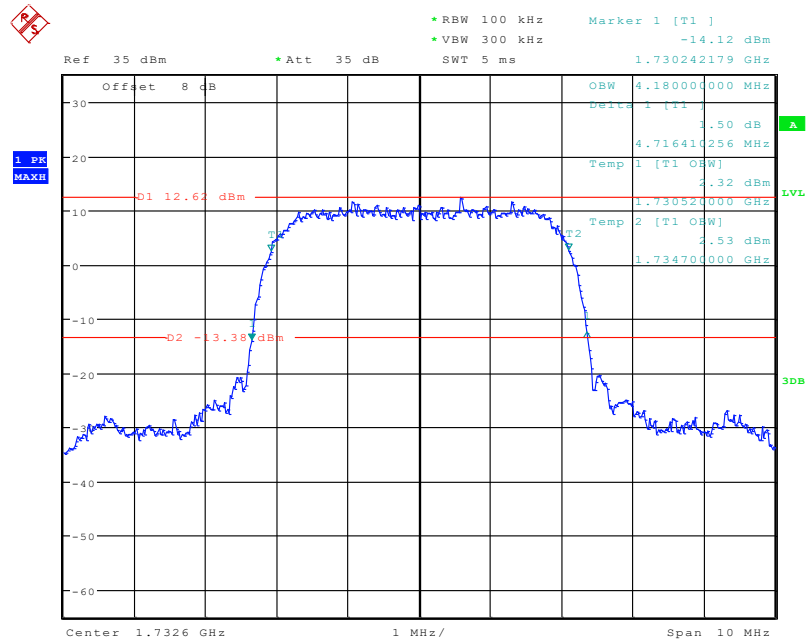
26 dB Emissions & 99% Occupied Bandwidth for HSUPA (BPSK) Mode, High channel



Date: 30.MAR.2022 11:42:43

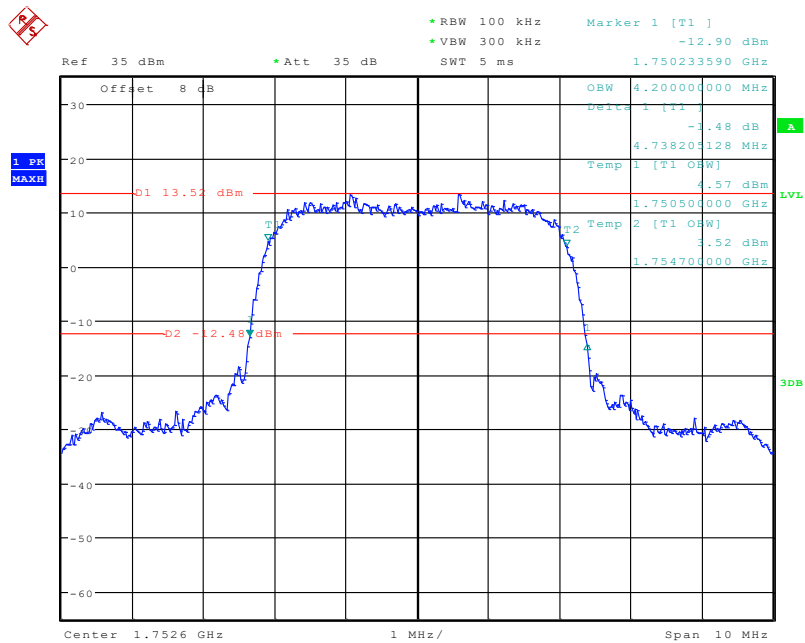
26 dB Emissions & 99% Occupied Bandwidth for HSDPA (16QAM) Mode, Low channel

Date: 25.MAR.2022 10:00:55

26 dB Emissions & 99% Occupied Bandwidth for HSDPA (16QAM) Mode, Middle channel

Date: 25.MAR.2022 10:03:05

26 dB Emissions & 99% Occupied Bandwidth for HSDPA (16QAM) Mode, High channel



Date: 25.MAR.2022 10:05:53

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	1.096	1.317	1.096	1.314	1.102	1.290
	16QAM	1.096	1.320	1.090	1.290	1.096	1.290
3 MHz	QPSK	2.683	2.868	2.695	2.880	2.683	2.880
	16QAM	2.683	2.880	2.683	2.880	2.683	2.880
5 MHz	QPSK	4.511	4.960	4.511	4.960	4.491	4.940
	16QAM	4.471	4.920	4.511	4.960	4.491	4.980
10 MHz	QPSK	8.942	9.720	8.942	9.600	8.942	9.640
	16QAM	8.942	9.560	8.942	9.680	8.982	9.640
15 MHz	QPSK	13.473	14.820	13.473	14.700	13.473	14.700
	16QAM	13.473	14.640	13.473	14.640	13.473	14.640
20 MHz	QPSK	17.964	19.200	17.964	19.200	17.964	19.440
	16QAM	17.964	19.280	17.964	19.440	17.964	19.280

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	1.108	1.380	1.102	1.314	1.102	1.290
	16QAM	1.108	1.350	1.090	1.290	1.096	1.296
3 MHz	QPSK	2.695	2.868	2.695	2.880	2.683	2.892
	16QAM	2.695	3.072	2.683	2.880	2.683	2.880
5 MHz	QPSK	4.511	4.996	4.531	7.680	4.491	4.940
	16QAM	4.491	4.920	4.511	4.960	4.511	5.000
10 MHz	QPSK	8.942	9.680	8.942	9.640	8.942	9.680
	16QAM	8.942	9.520	8.942	9.680	8.982	9.640
15 MHz	QPSK	13.473	14.700	13.473	14.731	13.413	14.820
	16QAM	13.473	14.640	13.533	14.640	13.533	14.640
20 MHz	QPSK	17.884	19.280	17.964	19.360	18.044	19.600
	16QAM	17.964	19.280	17.964	19.440	17.964	19.280

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	1.096	1.290	1.102	1.326	1.102	1.290
	16QAM	1.096	1.320	1.090	1.284	1.090	1.290
3 MHz	QPSK	2.683	2.868	2.683	2.868	2.683	2.880
	16QAM	2.683	2.880	2.683	2.868	2.683	2.868
5 MHz	QPSK	4.511	4.960	4.511	5.000	4.491	4.940
	16QAM	4.491	4.920	4.511	4.960	4.491	4.960
10 MHz	QPSK	8.942	9.720	8.942	9.600	8.942	9.640
	16QAM	8.942	9.520	8.942	9.600	8.982	9.680

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	4.960	4.500	4.900	4.520	4.940
	16QAM	4.520	4.960	4.500	4.960	4.520	4.960
10 MHz	QPSK	8.960	9.640	8.960	9.640	8.960	9.600
	16QAM	8.960	9.600	8.960	9.560	8.960	9.680
15 MHz	QPSK	13.560	14.760	13.500	14.760	13.500	14.760
	16QAM	13.500	14.760	13.500	14.640	13.500	14.700
20 MHz	QPSK	17.920	19.200	17.920	19.200	18.000	19.440
	16QAM	18.000	19.360	17.920	19.360	17.920	19.440

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	1.096	1.290	1.096	1.314	1.102	1.290
	16QAM	1.096	1.326	1.090	1.290	1.090	1.296
3 MHz	QPSK	2.683	2.868	2.683	2.880	2.683	2.880
	16QAM	2.683	2.880	2.683	2.880	2.683	2.868
5 MHz	QPSK	4.531	5.280	4.511	5.240	4.511	5.180
	16QAM	4.511	5.140	4.551	5.220	4.531	5.260
10 MHz	QPSK	8.942	10.000	8.942	9.800	8.982	9.960
	16QAM	8.942	9.800	8.942	9.840	8.982	9.880

LTE Band 17

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	4.551	5.240	4.511	5.240	4.511	5.200
	16QAM	4.511	5.160	4.551	5.240	4.531	5.220
10 MHz	QPSK	8.982	9.960	8.942	9.840	8.942	10.000
	16QAM	8.942	9.840	8.942	9.840	8.982	9.920

LTE Band 38

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	4.511	5.060	4.491	4.960	4.511	5.540
	16QAM	4.491	5.000	4.511	4.960	4.491	5.000
10 MHz	QPSK	8.942	9.720	8.942	9.640	8.942	9.560
	16QAM	8.942	9.480	8.942	9.520	8.942	9.920
15 MHz	QPSK	13.473	14.580	13.413	14.580	13.473	15.240
	16QAM	13.473	14.580	13.533	14.760	13.533	15.660
20 MHz	QPSK	17.884	19.200	17.884	19.200	17.884	19.600
	16QAM	17.884	19.440	17.884	19.520	17.964	19.280

LTE Band 41

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	4.491	5.020	4.511	5.000	4.511	4.980
	16QAM	4.491	4.980	4.511	5.040	4.511	5.020
10 MHz	QPSK	8.942	9.640	8.942	9.600	8.982	9.600
	16QAM	8.942	9.480	8.942	9.520	8.942	9.640
15 MHz	QPSK	13.533	14.760	13.413	14.580	13.413	14.880
	16QAM	13.473	15.540	13.533	15.300	13.533	15.720
20 MHz	QPSK	18.044	19.680	17.884	19.120	17.884	19.280
	16QAM	17.884	19.280	17.964	20.320	17.884	19.200

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	1.090	1.296	1.102	1.320	1.102	1.290
	16QAM	1.102	1.326	1.096	1.290	1.102	1.296
3 MHz	QPSK	2.683	2.868	2.695	2.880	2.683	2.892
	16QAM	2.671	2.880	2.683	2.880	2.683	2.880
5 MHz	QPSK	4.531	5.200	4.511	5.240	4.551	5.940
	16QAM	4.531	5.140	4.551	5.260	4.551	5.660
10 MHz	QPSK	8.942	9.880	8.942	9.880	8.942	9.920
	16QAM	8.982	9.760	8.981	9.920	8.982	9.880
15 MHz	QPSK	13.473	15.240	13.473	15.120	13.533	15.240
	16QAM	13.473	15.180	13.533	15.060	13.533	15.120
20 MHz	QPSK	17.884	19.440	17.884	19.600	18.044	20.000
	16QAM	17.884	19.520	18.044	19.840	17.964	19.760

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

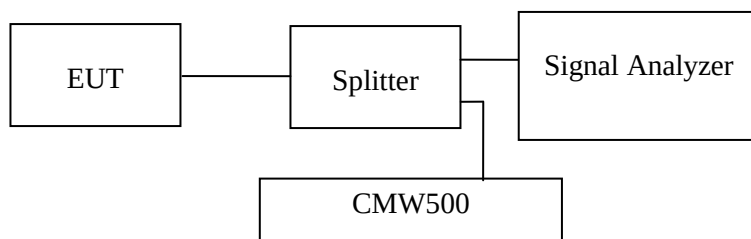
Applicable Standard

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.



Test Data

Environmental Conditions

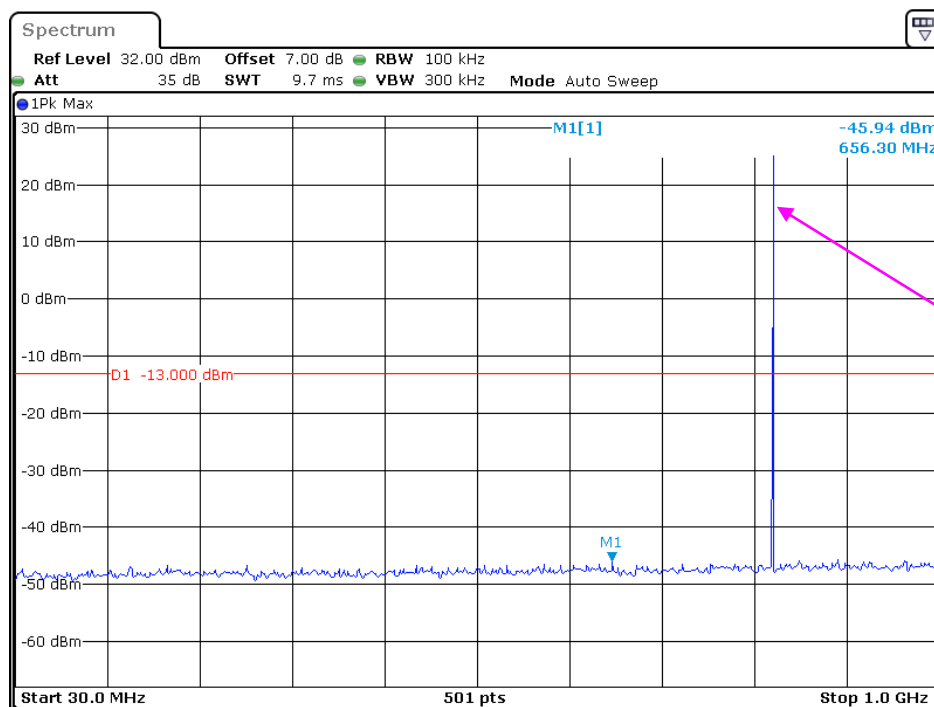
Temperature:	25~28 °C
Relative Humidity:	52.1~56.2 %
ATM Pressure:	101.0 kPa

The testing was performed by Key Pei from 2022-03-12 to 2022-03-31.

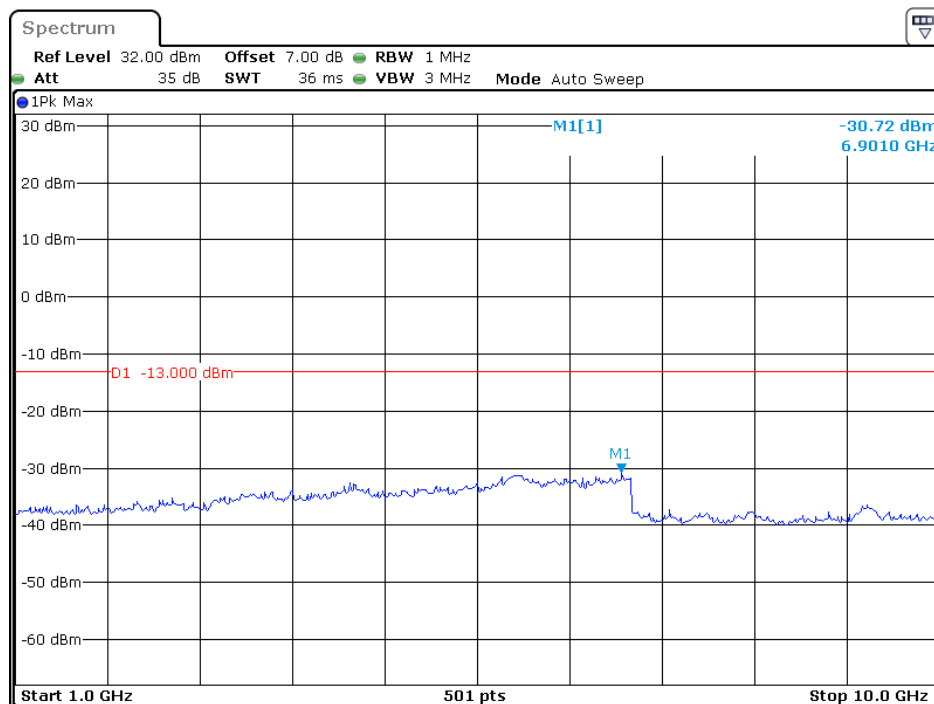
EUT operation mode: Transmitting

Test result: Pass

Please refer to the following plots.

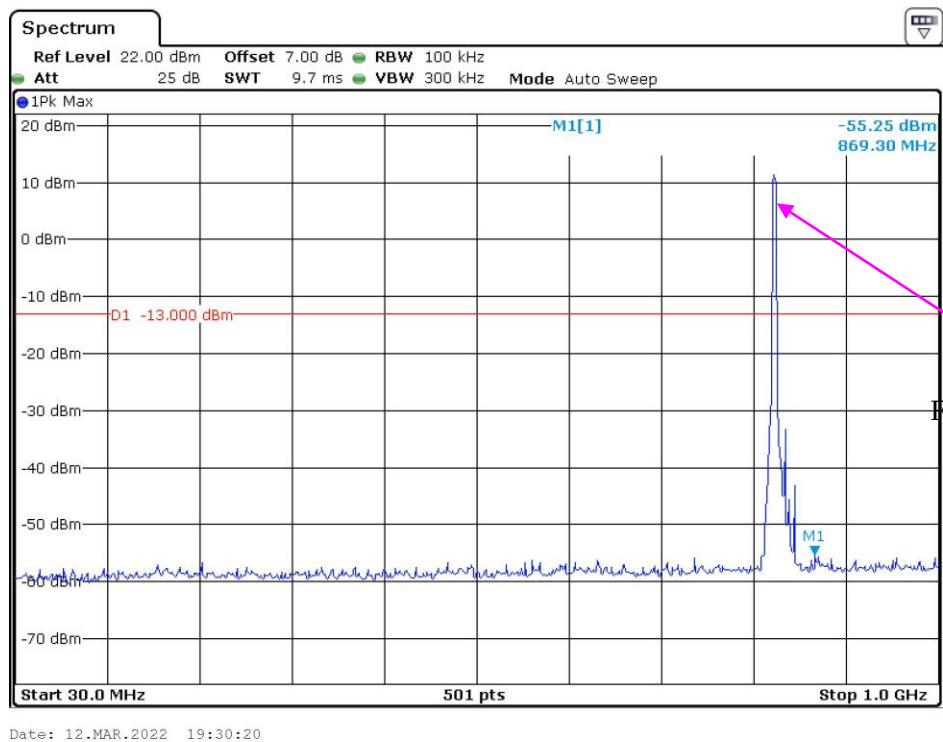
Cellular Band (Part 22H)**Low Channel:****30 MHz – 1 GHz (GSM Mode)**

Date: 12.MAR.2022 17:05:36

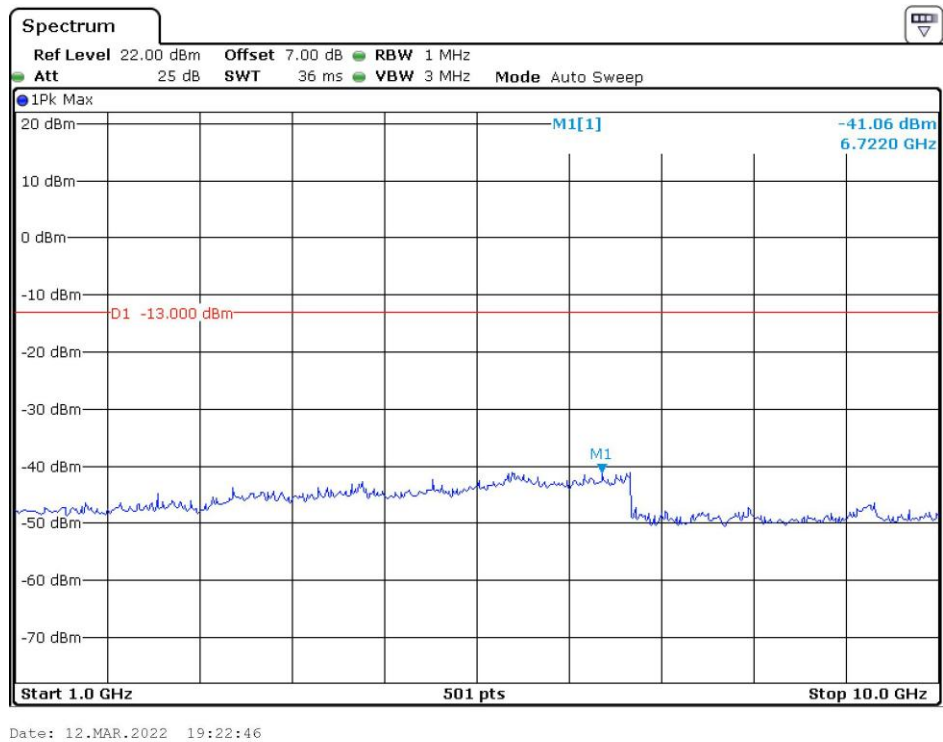
1 GHz – 10 GHz (GSM Mode)

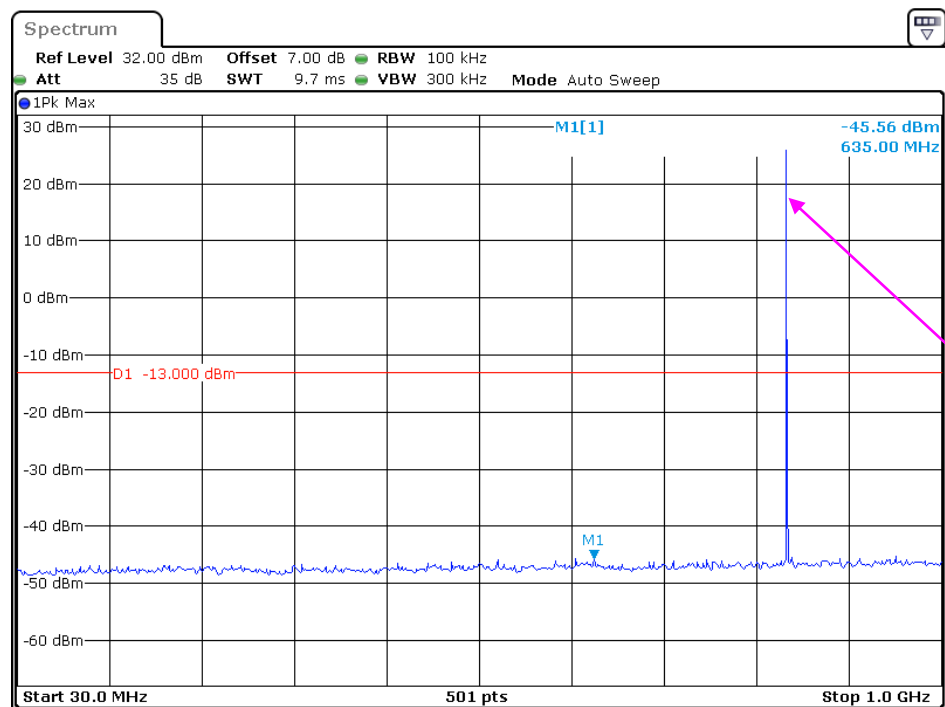
Date: 12.MAR.2022 17:16:31

30 MHz – 1 GHz (WCDMA Mode)



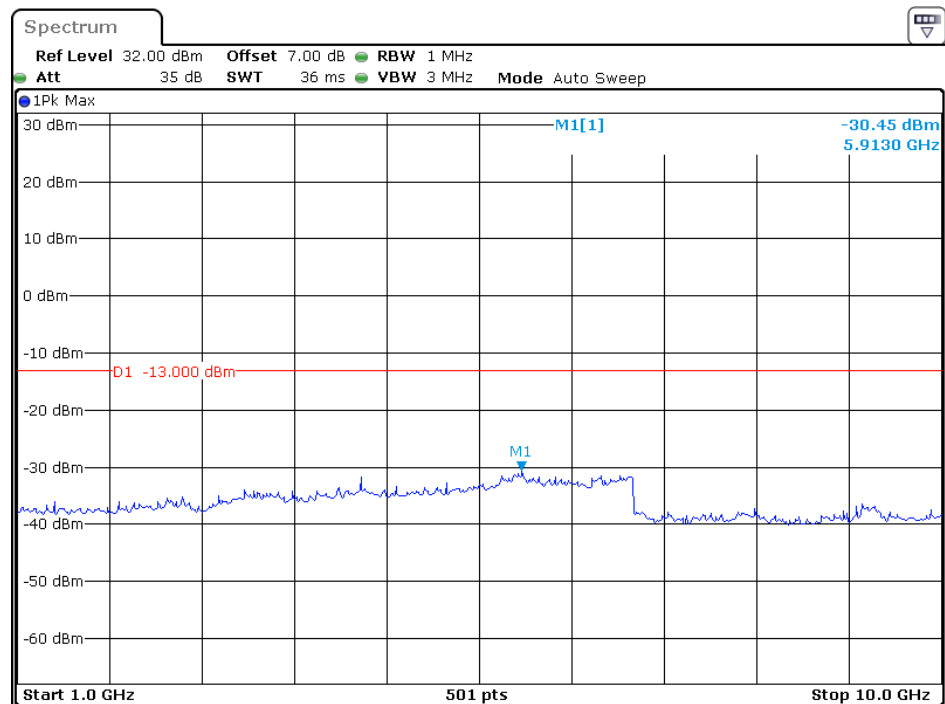
1 GHz – 10 GHz (WCDMA Mode)



Middle Channel:**30 MHz – 1 GHz (GSM Mode)**

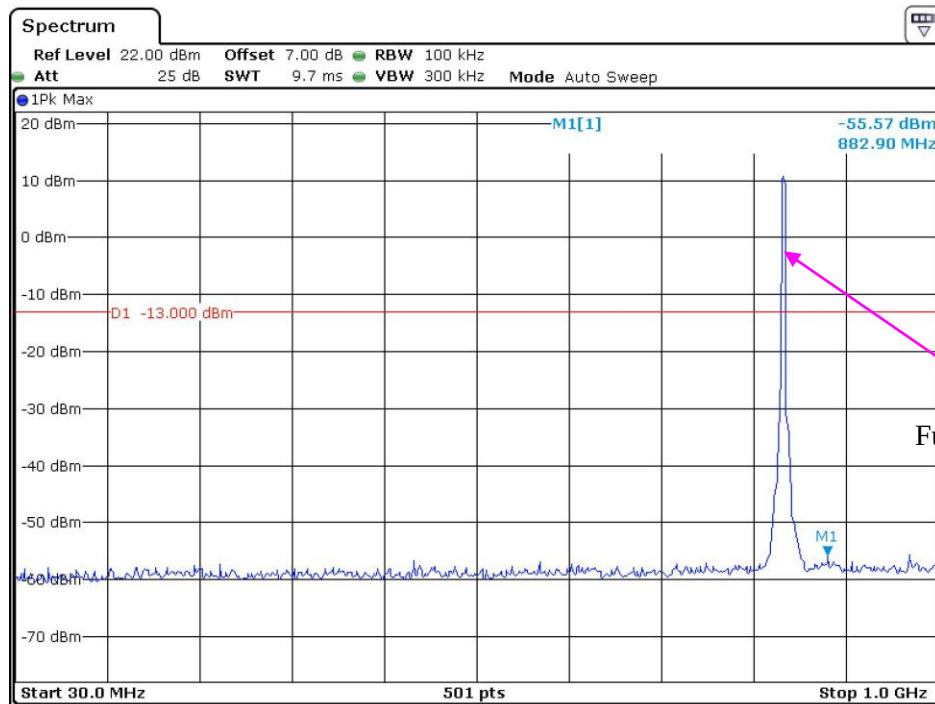
Date: 12.MAR.2022 17:12:32

Fundamental test

1 GHz – 10 GHz (GSM Mode)

Date: 12.MAR.2022 17:15:14

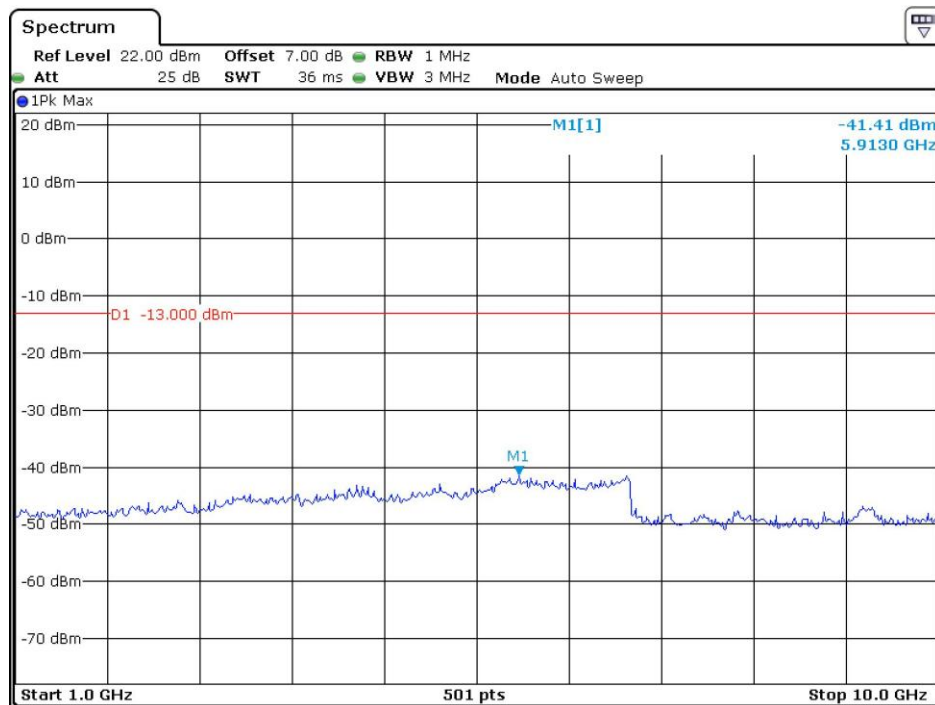
30 MHz – 1 GHz (WCDMA Mode)



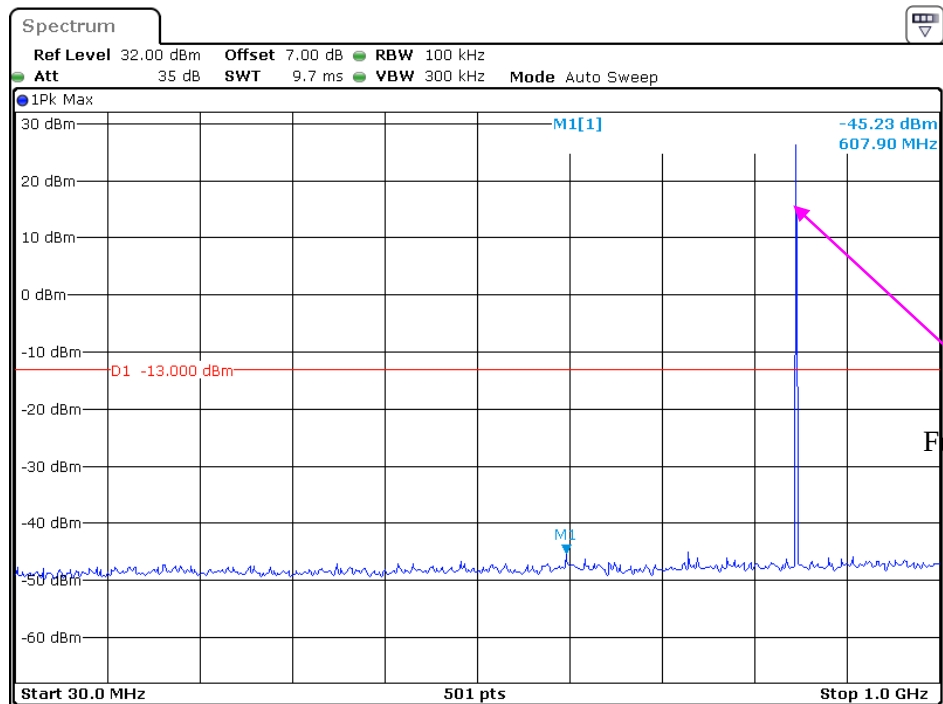
Date: 12.MAR.2022 19:30:43

Fundamental test

1 GHz – 10 GHz (WCDMA Mode)

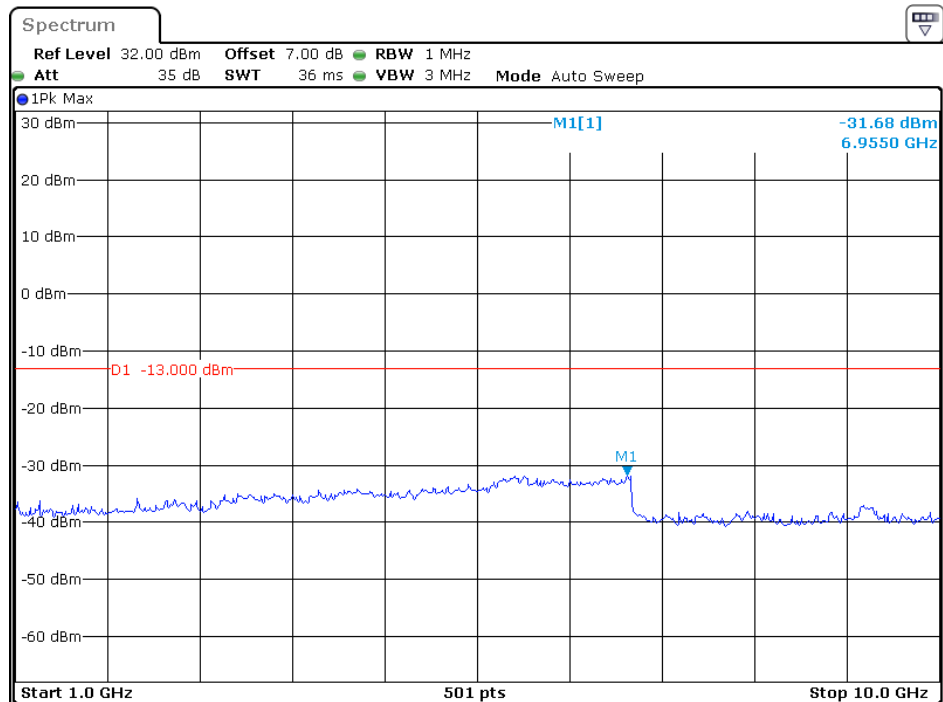


Date: 12.MAR.2022 19:23:02

High Channel:**30 MHz – 1 GHz (GSM Mode)**

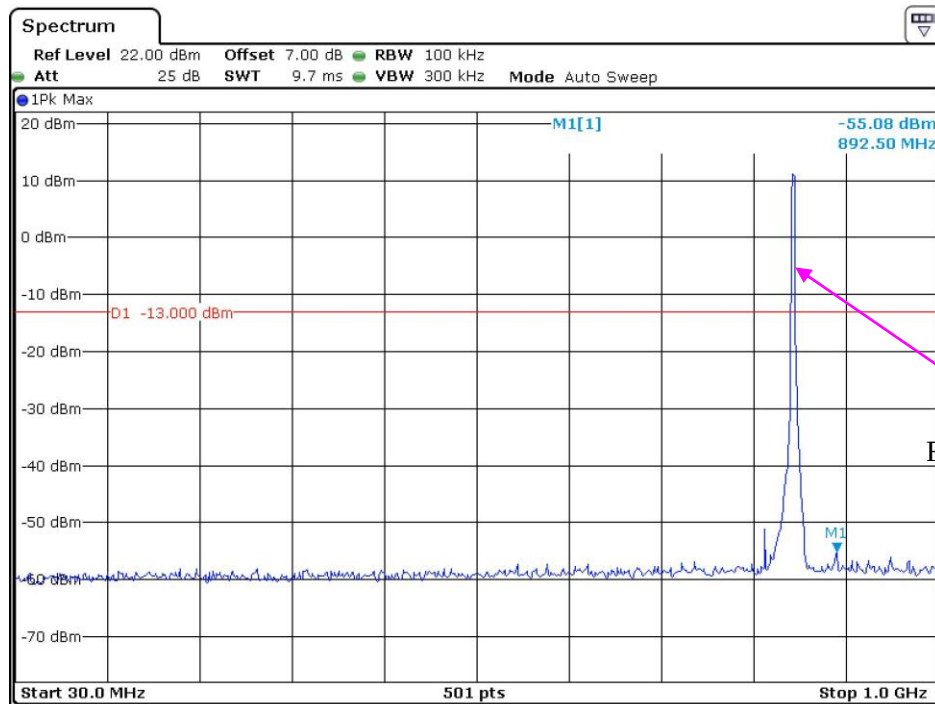
Date: 12.MAR.2022 17:13:35

Fundamental test

1 GHz – 10 GHz (GSM Mode)

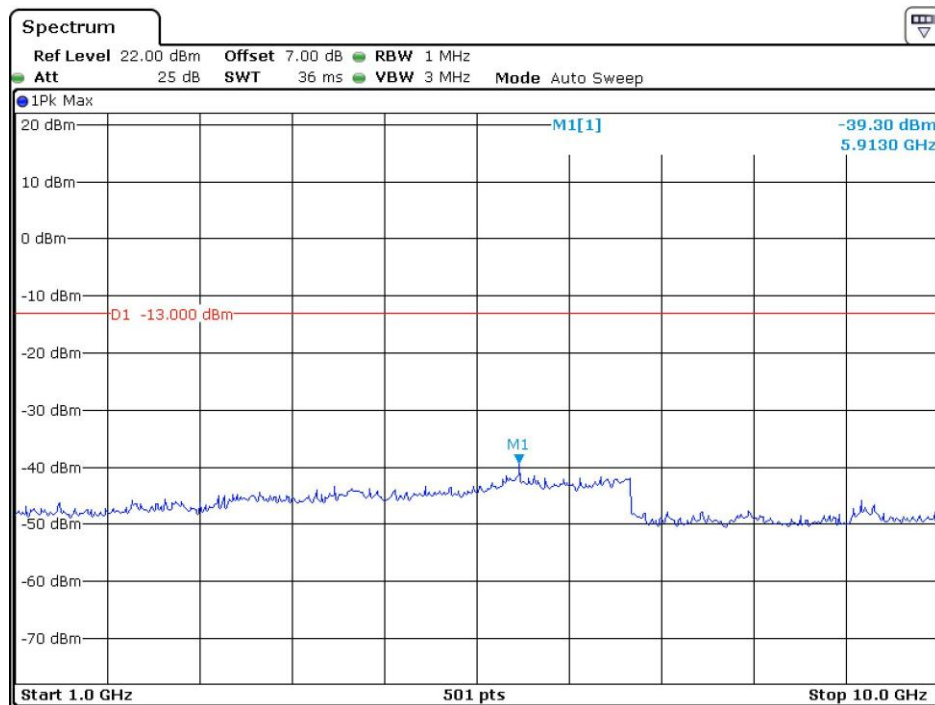
Date: 12.MAR.2022 17:14:16

30 MHz – 1 GHz (WCDMA Mode)

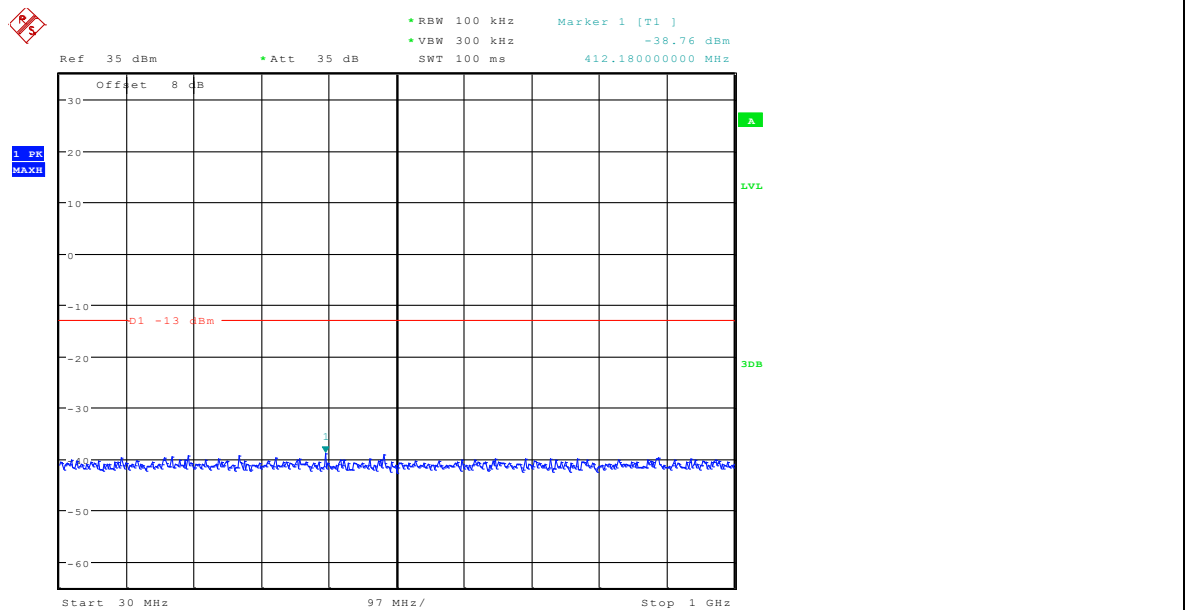


Date: 12.MAR.2022 19:31:00

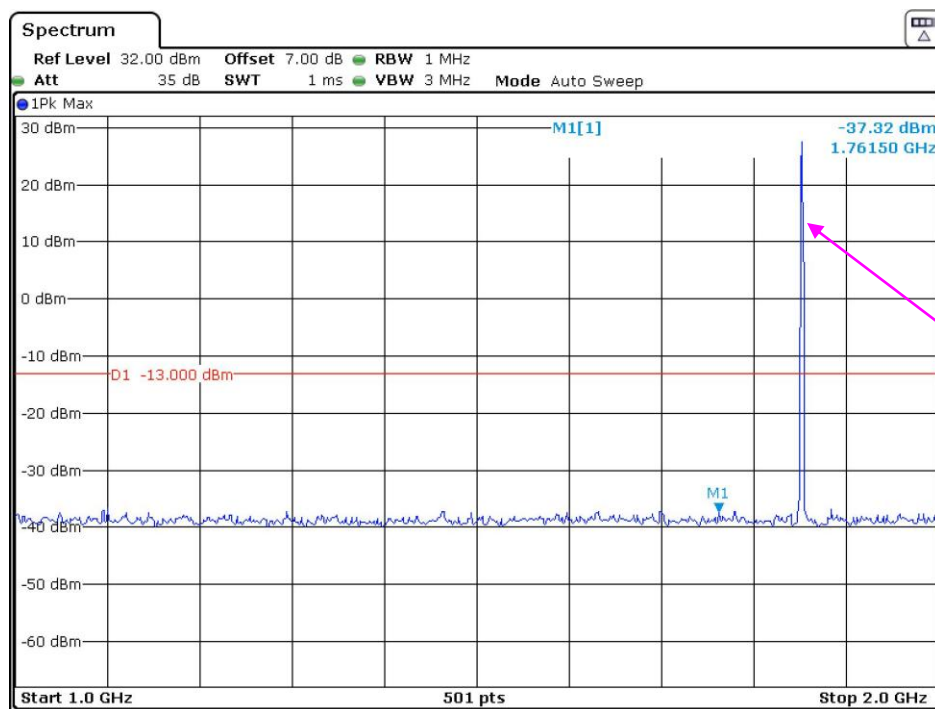
1 GHz – 10 GHz (WCDMA Mode)



Date: 12.MAR.2022 19:23:26

PCS Band (Part 24E)
Low Channel:**30 MHz – 1 GHz (GSM Mode)**

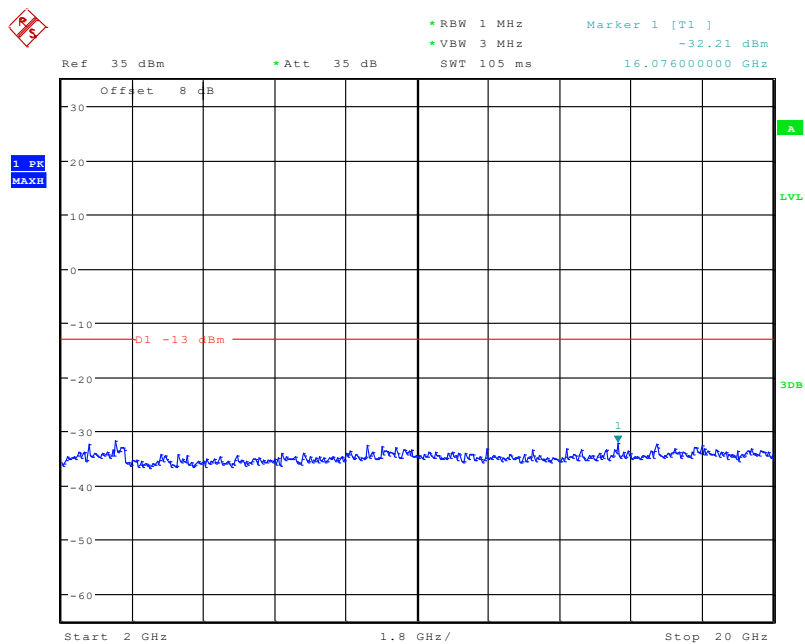
Date: 25.MAR.2022 11:40:09

1 GHz – 2 GHz (GSM Mode)

Date: 30.MAR.2022 11:49:17

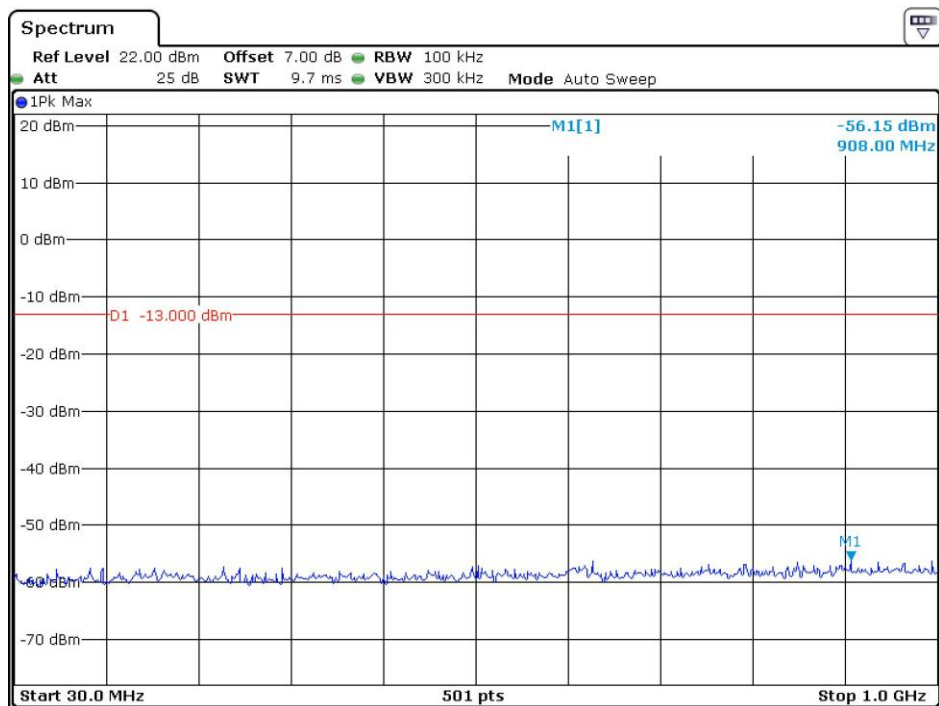
Fundamental test

2 GHz – 20 GHz (GSM Mode)



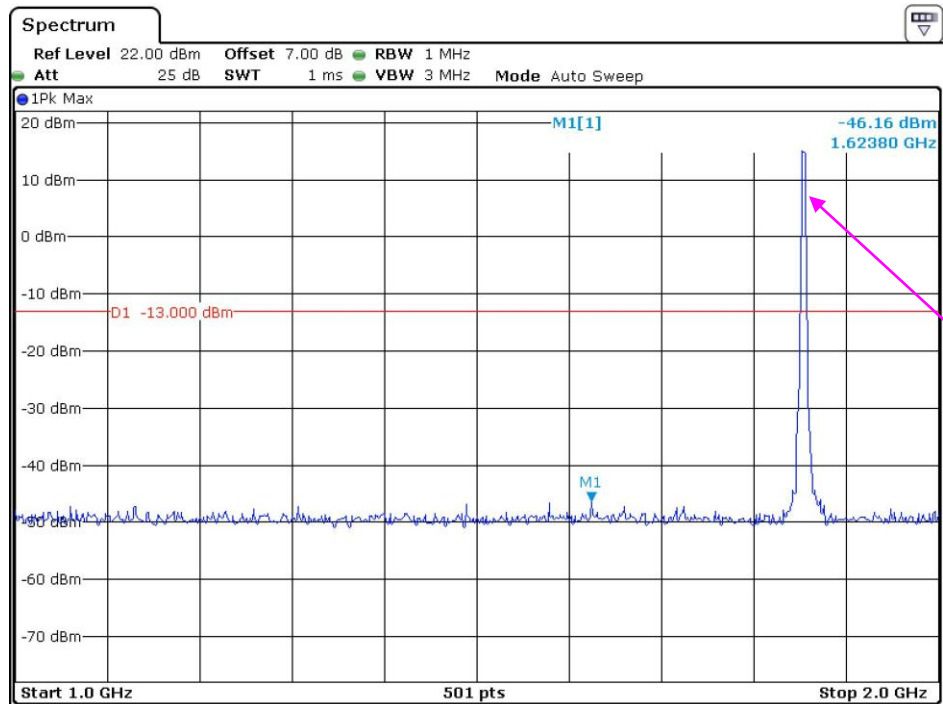
Date: 25.MAR.2022 11:43:43

30 MHz – 1 GHz (WCDMA Mode)



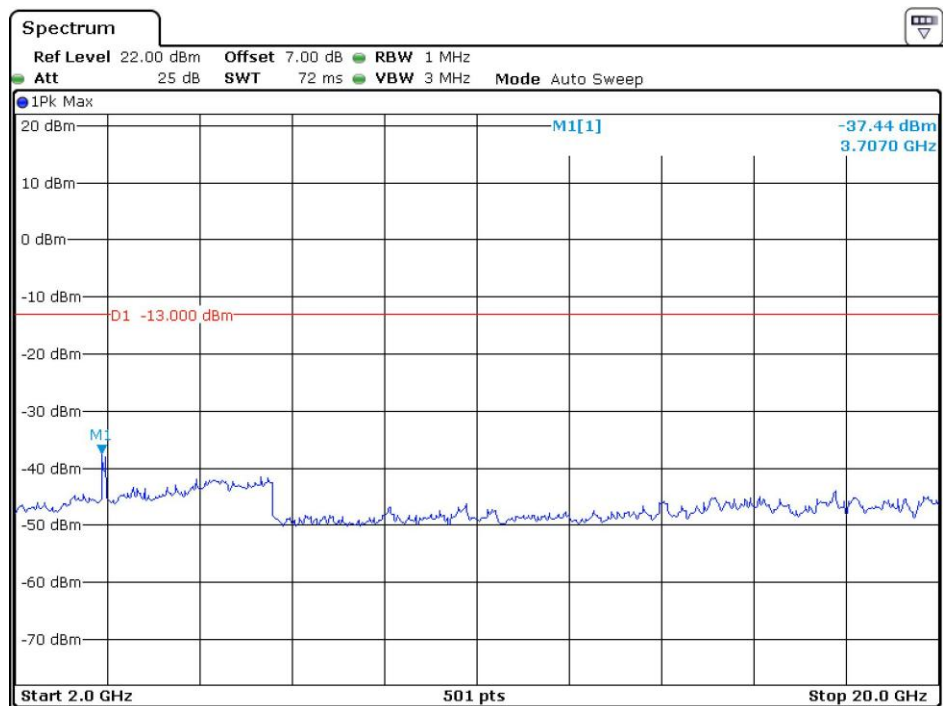
Date: 12.MAR.2022 19:29:27

1 GHz – 2 GHz (WCDMA Mode)

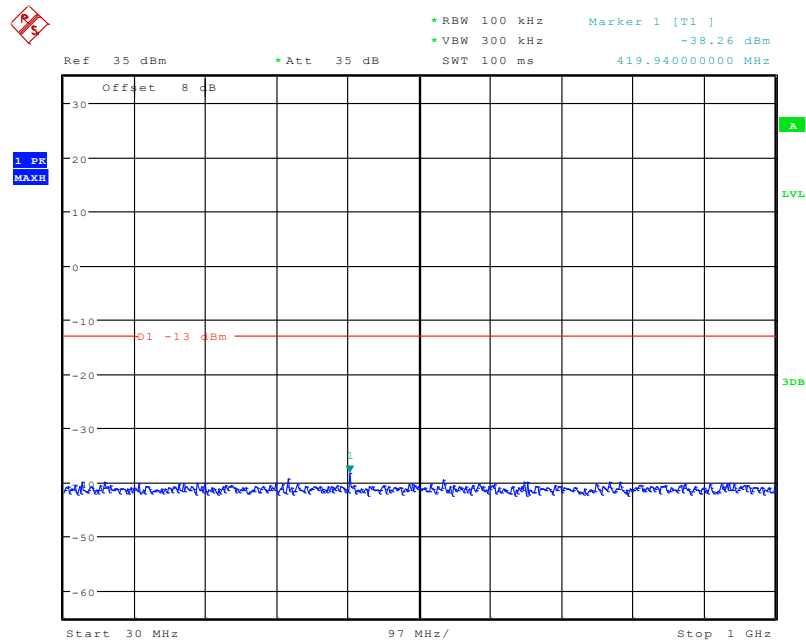


Date: 12.MAR.2022 19:24:57

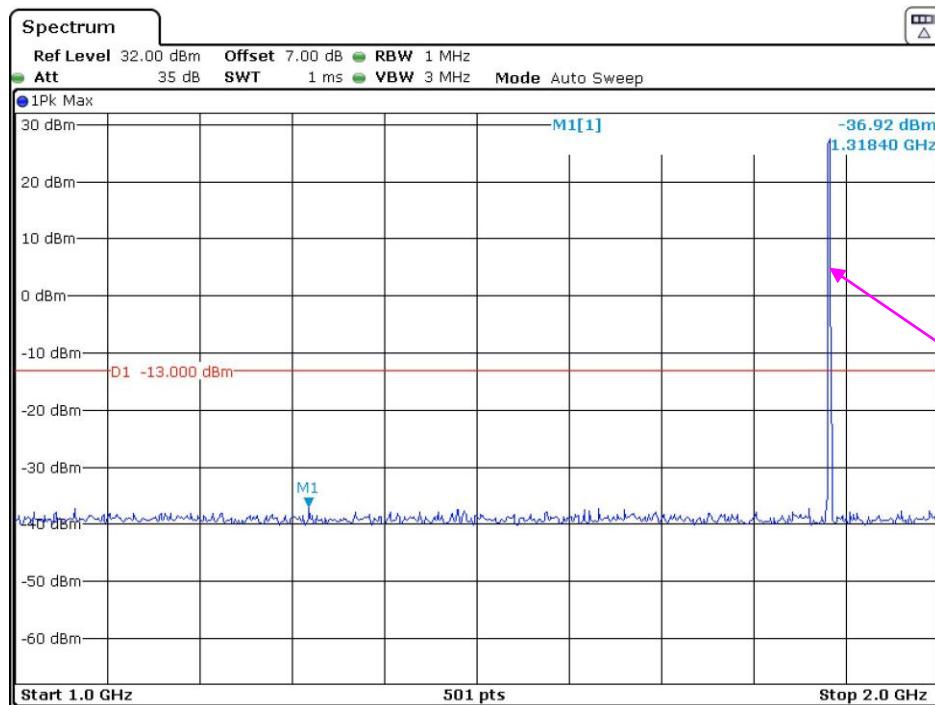
2 GHz – 20 GHz (WCDMA Mode)



Date: 12.MAR.2022 19:20:50

Middle Channel:**30 MHz – 1 GHz (GSM Mode)**

Date: 25.MAR.2022 11:39:23

1 GHz – 2 GHz (GSM Mode)

Date: 30.MAR.2022 11:50:01

Fundamental test