



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 : SZNS220609-25498E-RF-00D
FCC ID: 2ADYY-KH7S

Test Standard (s)

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

Sample Description

Product Type: Mobile Phone
Model No.: KH7S
Multiple Model(s) No.: N/A
Trade Mark: N/A
Date Received: 2022/06/09
Report Date: 2022/07/15

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

Robert Li

Roger Ling
EMC Engineer

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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Shenzhen Accurate Technology Co., Ltd.

1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China

Tel: +86 755-26503290

Fax: +86 755-26503396

Web: www.atc-lab.com

Version 2: 2021-11-09

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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 13: 777-787MHz(TX); 746-756MHz(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 Band 5/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 13/LTE Band 17: -1.9dBi(provided by the applicant)
Voltage Range	DC 3.85V from battery or DC 5V or 7.5V from adapter
Sample serial number	SZNS220609-25498E-RF-S1 for Radiated Emissions SZNS220609-25498E-RF-S2 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 4.4V (provided by the applicant)

Objective

This test report is in accordance with Part 2-Subpart J, Part 22-Subpart H, Part24-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	836.4	848.8
PCS1900	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	836.4	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
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 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.

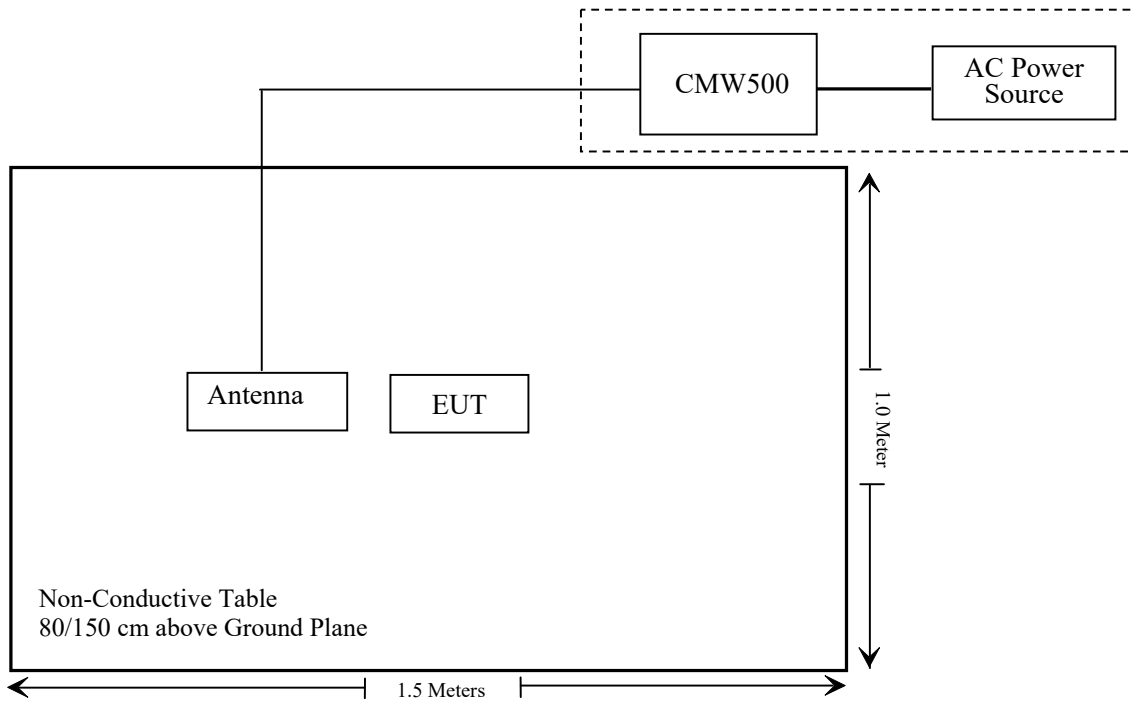
Support Equipment List and Details

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(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

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
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
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
WEINSCHEL	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: SZNS220609-25498E-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(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), 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.

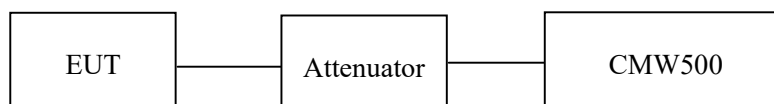
According to §27.50(d), Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

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:	27.1~27.3°C
Relative Humidity:	56~56.8 %
ATM Pressure:	101.0 kPa

The testing was performed by Roger Ling from 2022-06-28 to 2022-07-02.

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

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	ERP (dBm)	Limit (dBm)
GSM	128	824.2	33.46	29.81	38.45
	190	836.6	33.59	29.94	38.45
	251	848.8	33.53	29.88	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	33.39	32.31	30.27	29.13	29.74	28.66	26.62	25.48	38.45
	190	836.6	33.52	32.38	30.37	29.26	29.87	28.73	26.72	25.61	38.45
	251	848.8	33.46	32.35	30.36	29.22	29.81	28.70	26.71	25.57	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	27.31	25.95	23.63	22.25	23.66	22.3	19.98	18.6	38.45
	190	836.6	27.29	25.99	23.62	22.26	23.64	22.34	19.97	18.61	38.45
	251	848.8	27.46	26.07	23.71	22.37	23.81	22.42	20.06	18.72	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		23.71	23.73	23.69	20.06	20.08	20.04
	HSDPA	1	22.58	22.69	22.65	18.93	19.04	19.00
		2	22.44	22.55	22.58	18.79	18.90	18.93
		3	22.36	22.58	22.57	18.71	18.93	18.92
		4	22.47	22.61	22.46	18.82	18.96	18.81
	HSUPA	1	22.24	22.22	22.19	18.59	18.57	18.54
		2	22.14	22.15	22.14	18.49	18.50	18.49
		3	22.16	22.13	22.13	18.51	18.48	18.48
		4	22.13	22.36	22.21	18.48	18.71	18.56
		5	22.16	22.17	22.13	18.51	18.52	18.48
HSPA+	1	22.17	22.16	22.17	18.52	18.51	18.52	

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	30.50	30.00	33
	661	1880.0	30.60	30.10	33
	810	1909.8	30.60	30.10	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	30.56	29.14	26.94	26.36	30.06	28.64	26.44	25.86	33
	661	1880.0	30.58	29.16	26.95	26.43	30.08	28.66	26.45	25.93	33
	810	1909.8	30.65	29.20	27.09	26.56	30.15	28.7	26.59	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	27.38	25.40	23.32	22.24	26.88	24.90	22.82	21.74	33
	661	1880.0	27.18	25.12	23.13	22.09	26.68	24.62	22.63	21.59	33
	810	1909.8	27.07	25.04	23.04	22.01	26.57	24.54	22.54	21.51	33

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 2)	RMC12.2k		21.12	21.02	21.04	20.62	20.52	20.54
	HSDPA	1	20.03	19.93	19.93	19.53	19.43	19.43
		2	20.14	19.97	19.87	19.64	19.47	19.37
		3	20.13	19.96	19.83	19.63	19.46	19.33
		4	20.07	19.86	19.86	19.57	19.36	19.36
	HSUPA	1	19.60	19.51	19.59	19.1	19.01	19.09
		2	19.58	19.58	19.67	19.08	19.08	19.17
		3	19.62	19.62	19.54	19.12	19.12	19.04
		4	19.57	19.57	19.56	19.07	19.07	19.06
		5	19.64	19.64	19.67	19.14	19.14	19.17
	HSPA+	1	19.58	19.58	19.54	19.08	19.08	19.04

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		19.21	19.29	19.29	18.51	18.59	18.59
	HSDPA	1	18.19	18.27	18.24	17.49	17.57	17.54
		2	18.15	18.17	18.21	17.45	17.47	17.51
		3	18.62	18.22	18.26	17.92	17.52	17.56
		4	18.24	18.26	18.34	17.54	17.56	17.64
	HSUPA	1	17.73	17.86	17.86	17.03	17.16	17.16
		2	17.36	17.77	17.52	16.66	17.07	16.82
		3	17.45	17.69	17.46	16.75	16.99	16.76
		4	17.64	17.58	17.59	16.94	16.88	16.89
		5	17.42	17.64	17.54	16.72	16.94	16.84
	HSPA+	1	17.58	17.39	17.59	16.88	16.69	16.89

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

For Band4: Antenna Gain = -0.7dBi

Limit: EIRP ≤ 30dBm

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

Mode	Channel	PAR (dB)	Limit (dB)
GSM	Low	3.57	13
	Middle	3.46	13
	High	3.51	13

Mode	Channel	PAR (dB)	Limit (dB)
EGPRS	Low	3.43	13
	Middle	3.49	13
	High	3.41	13

Mode	Channel	PAR (dB)	Limit (dB)
RMC (BPSK)	Low	3.42	13
	Middle	3.47	13
	High	3.49	13
HSDPA (16QAM)	Low	3.57	13
	Middle	3.47	13
	High	3.56	13
HSUPA (BPSK)	Low	3.47	13
	Middle	3.49	13
	High	3.48	13
HSPA+	Low	3.51	13
	Middle	3.42	13
	High	3.51	13

PCS Band

Mode	Channel	PAR (dB)	Limit (dB)
GSM	Low	3.52	13
	Middle	3.42	13
	High	3.51	13

Mode	Channel	PAR (dB)	Limit (dB)
EGPRS	Low	3.36	13
	Middle	3.45	13
	High	3.52	13

Mode	Channel	PAR (dB)	Limit (dB)
RMC (BPSK)	Low	3.44	13
	Middle	3.58	13
	High	3.51	13
HSDPA (16QAM)	Low	3.47	13
	Middle	3.52	13
	High	3.42	13
HSUPA (BPSK)	Low	3.47	13
	Middle	3.41	13
	High	3.59	13
HSPA+	Low	3.47	13
	Middle	3.42	13
	High	3.55	13

AWS Band

Mode	Channel	PAR (dB)	Limit (dB)
RMC (BPSK)	Low	3.47	13
	Middle	3.46	13
	High	3.42	13
HSDPA (16QAM)	Low	3.41	13
	Middle	3.61	13
	High	3.47	13
HSUPA (BPSK)	Low	3.49	13
	Middle	3.51	13
	High	3.33	13
HSPA+	Low	3.41	13
	Middle	3.46	13
	High	3.52	13

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	18.29	18.52	18.19	17.79	18.02	17.69
		RB1#3	18.37	18.40	18.37	17.87	17.90	17.87
		RB1#5	18.25	18.30	18.00	17.75	17.80	17.50
		RB3#0	17.37	17.60	17.30	16.87	17.10	16.80
		RB3#3	17.28	17.52	17.21	16.78	17.02	16.71
		RB6#0	17.21	17.44	17.45	16.71	16.94	16.95
	16QAM	RB1#0	18.03	17.68	17.78	17.53	17.18	17.28
		RB1#3	17.99	17.58	17.69	17.49	17.08	17.19
		RB1#5	18.22	17.46	17.53	17.72	16.96	17.03
		RB3#0	16.23	16.40	16.35	15.73	15.90	15.85
		RB3#3	16.30	16.54	16.22	15.80	16.04	15.72
		RB6#0	16.27	16.32	16.40	15.77	15.82	15.90
3.0	QPSK	RB1#0	18.26	18.20	18.11	17.76	17.70	17.61
		RB1#8	18.33	18.61	18.33	17.83	18.11	17.83
		RB1#14	18.24	17.99	17.97	17.74	17.49	17.47
		RB6#0	17.32	17.45	17.52	16.82	16.95	17.02
		RB6#9	17.44	17.51	17.33	16.94	17.01	16.83
		RB15#0	17.46	17.54	17.29	16.96	17.04	16.79
	16QAM	RB1#0	17.45	17.63	17.72	16.95	17.13	17.22
		RB1#8	17.86	17.80	18.05	17.36	17.30	17.55
		RB1#14	17.49	17.39	17.64	16.99	16.89	17.14
		RB6#0	16.28	16.59	16.69	15.78	16.09	16.19
		RB6#9	16.54	16.69	16.48	16.04	16.19	15.98
		RB15#0	16.32	16.68	16.40	15.82	16.18	15.90

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	18.40	18.43	18.28	17.90	17.93	17.78
		RB1#13	18.37	18.43	18.30	17.87	17.93	17.80
		RB1#24	18.31	18.44	18.22	17.81	17.94	17.72
		RB15#0	17.52	17.57	17.43	17.02	17.07	16.93
		RB15#10	17.46	17.48	17.44	16.96	16.98	16.94
		RB25#0	17.43	17.45	17.46	16.93	16.95	16.96
	16QAM	RB1#0	18.07	17.57	17.92	17.57	17.07	17.42
		RB1#13	18.12	17.71	17.82	17.62	17.21	17.32
		RB1#24	18.20	17.67	17.61	17.70	17.17	17.11
		RB15#0	16.45	16.72	16.40	15.95	16.22	15.90
		RB15#10	16.65	16.64	16.29	16.15	16.14	15.79
		RB25#0	16.32	16.53	16.33	15.82	16.03	15.83
10.0	QPSK	RB1#0	18.34	18.44	18.07	17.84	17.94	17.57
		RB1#25	18.64	18.58	18.50	18.14	18.08	18.00
		RB1#49	18.26	18.07	17.91	17.76	17.57	17.41
		RB25#0	17.32	17.70	17.52	16.82	17.20	17.02
		RB25#25	17.33	17.52	17.35	16.83	17.02	16.85
		RB50#0	17.56	17.47	17.46	17.06	16.97	16.96
	16QAM	RB1#0	17.76	17.67	17.73	17.26	17.17	17.23
		RB1#25	18.08	17.96	18.06	17.58	17.46	17.56
		RB1#49	17.61	17.58	17.60	17.11	17.08	17.10
		RB25#0	16.61	16.61	16.64	16.11	16.11	16.14
		RB25#25	16.47	16.60	16.53	15.97	16.10	16.03
		RB50#0	16.43	16.63	16.55	15.93	16.13	16.05

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	18.23	18.44	18.15	17.73	17.94	17.65
		RB1#38	18.40	18.29	17.96	17.90	17.79	17.46
		RB1#74	18.29	18.23	17.86	17.79	17.73	17.36
		RB36#0	17.24	17.32	17.28	16.74	16.82	16.78
		RB36#39	17.31	17.30	17.08	16.81	16.80	16.58
		RB75#0	17.34	17.32	17.26	16.84	16.82	16.76
	16QAM	RB1#0	17.92	17.49	17.73	17.42	16.99	17.23
		RB1#38	17.90	17.61	17.58	17.40	17.11	17.08
		RB1#74	17.95	17.25	17.50	17.45	16.75	17.00
		RB36#0	16.11	16.50	16.21	15.61	16.00	15.71
		RB36#39	16.37	16.33	16.27	15.87	15.83	15.77
		RB75#0	16.38	16.31	16.26	15.88	15.81	15.76
20.0	QPSK	RB1#0	18.10	18.12	17.95	17.60	17.62	17.45
		RB1#50	18.44	18.44	18.19	17.94	17.94	17.69
		RB1#99	18.13	17.89	17.72	17.63	17.39	17.22
		RB50#0	17.35	17.43	17.53	16.85	16.93	17.03
		RB50#50	17.34	17.39	17.34	16.84	16.89	16.84
		RB100#0	17.26	17.54	17.30	16.76	17.04	16.80
	16QAM	RB1#0	17.42	17.35	17.56	16.92	16.85	17.06
		RB1#50	17.84	17.65	17.80	17.34	17.15	17.30
		RB1#99	17.44	17.32	17.30	16.94	16.82	16.80
		RB50#0	16.36	16.41	16.53	15.86	15.91	16.03
		RB50#50	16.20	16.55	16.24	15.70	16.05	15.74
		RB100#0	16.41	16.40	16.43	15.91	15.90	15.93

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band2: Antenna Gain = -0.50dBi
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	16.44	16.60	16.43	15.74	15.90	15.73
		RB1#3	16.68	16.82	16.58	15.98	16.12	15.88
		RB1#5	16.49	16.49	16.37	15.79	15.79	15.67
		RB3#0	15.62	15.71	15.78	14.92	15.01	15.08
		RB3#3	15.66	15.83	15.57	14.96	15.13	14.87
		RB6#0	15.71	15.66	15.72	15.01	14.96	15.02
	16QAM	RB1#0	16.25	15.93	15.98	15.55	15.23	15.28
		RB1#3	16.44	15.84	16.03	15.74	15.14	15.33
		RB1#5	16.26	15.85	15.89	15.56	15.15	15.19
		RB3#0	14.67	14.72	14.62	13.97	14.02	13.92
		RB3#3	14.73	14.89	14.48	14.03	14.19	13.78
		RB6#0	14.70	14.86	14.60	14.00	14.16	13.90
3.0	QPSK	RB1#0	16.43	16.52	16.17	15.73	15.82	15.47
		RB1#8	16.79	16.80	16.60	16.09	16.10	15.90
		RB1#14	16.42	16.47	16.07	15.72	15.77	15.37
		RB6#0	15.76	15.72	15.93	15.06	15.02	15.23
		RB6#9	15.64	15.71	15.66	14.94	15.01	14.96
		RB15#0	15.86	15.70	15.64	15.16	15.00	14.94
	16QAM	RB1#0	15.84	15.83	15.88	15.14	15.13	15.18
		RB1#8	16.23	16.13	16.15	15.53	15.43	15.45
		RB1#14	15.95	15.78	15.78	15.25	15.08	15.08
		RB6#0	14.65	14.71	14.76	13.95	14.01	14.06
		RB6#9	14.79	15.05	14.65	14.09	14.35	13.95
		RB15#0	14.67	14.72	14.90	13.97	14.02	14.20

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	16.61	16.75	16.38	15.91	16.05	15.68
		RB1#13	16.55	16.53	16.47	15.85	15.83	15.77
		RB1#24	16.47	16.33	16.35	15.77	15.63	15.65
		RB15#0	15.52	15.67	15.61	14.82	14.97	14.91
		RB15#10	15.61	15.58	15.60	14.91	14.88	14.90
		RB25#0	15.57	15.70	15.41	14.87	15.00	14.71
	16QAM	RB1#0	16.25	15.89	16.00	15.55	15.19	15.30
		RB1#13	16.25	15.89	15.87	15.55	15.19	15.17
		RB1#24	16.25	15.59	15.76	15.55	14.89	15.06
		RB15#0	14.56	14.55	14.64	13.86	13.85	13.94
		RB15#10	14.70	14.72	14.40	14.00	14.02	13.70
		RB25#0	14.59	14.77	14.45	13.89	14.07	13.75
10.0	QPSK	RB1#0	16.25	16.57	16.14	15.55	15.87	15.44
		RB1#25	16.75	16.81	16.52	16.05	16.11	15.82
		RB1#49	16.38	16.31	16.16	15.68	15.61	15.46
		RB25#0	15.66	15.87	15.70	14.96	15.17	15.00
		RB25#25	15.57	15.66	15.55	14.87	14.96	14.85
		RB50#0	15.54	15.74	15.62	14.84	15.04	14.92
	16QAM	RB1#0	15.64	15.83	16.05	14.94	15.13	15.35
		RB1#25	16.13	16.11	16.13	15.43	15.41	15.43
		RB1#49	15.85	15.58	15.65	15.15	14.88	14.95
		RB25#0	14.73	14.67	14.68	14.03	13.97	13.98
		RB25#25	14.63	14.76	14.66	13.93	14.06	13.96
		RB50#0	14.60	14.86	14.67	13.90	14.16	13.97

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	16.72	16.74	16.42	16.02	16.04	15.72
		RB1#38	16.59	16.72	16.33	15.89	16.02	15.63
		RB1#74	16.51	16.50	16.46	15.81	15.80	15.76
		RB36#0	15.63	15.62	15.62	14.93	14.92	14.92
		RB36#39	15.51	15.55	15.37	14.81	14.85	14.67
		RB75#0	15.66	15.63	15.68	14.96	14.93	14.98
	16QAM	RB1#0	16.15	15.89	15.96	15.45	15.19	15.26
		RB1#38	16.42	15.80	15.82	15.72	15.10	15.12
		RB1#74	16.41	15.75	15.79	15.71	15.05	15.09
		RB36#0	14.63	14.81	14.51	13.93	14.11	13.81
		RB36#39	14.64	14.75	14.55	13.94	14.05	13.85
		RB75#0	14.65	14.65	14.53	13.95	13.95	13.83
20.0	QPSK	RB1#0	16.24	16.63	16.22	15.54	15.93	15.52
		RB1#50	16.65	17.04	16.62	15.95	16.34	15.92
		RB1#99	16.50	16.53	16.13	15.80	15.83	15.43
		RB50#0	15.63	15.73	15.66	14.93	15.03	14.96
		RB50#50	15.74	15.70	15.51	15.04	15.00	14.81
		RB100#0	15.60	15.69	15.82	14.90	14.99	15.12
	16QAM	RB1#0	15.82	15.87	15.99	15.12	15.17	15.29
		RB1#50	15.97	16.02	16.37	15.27	15.32	15.67
		RB1#99	15.82	15.78	15.86	15.12	15.08	15.16
		RB50#0	14.61	14.87	14.93	13.91	14.17	14.23
		RB50#50	14.65	14.70	14.71	13.95	14.00	14.01
		RB100#0	14.72	14.72	14.76	14.02	14.02	14.06

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

For Band4: Antenna Gain = -0.7dBi

Limit: EIRP ≤ 30dBm

LTE Band5

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	22.29	22.26	22.18	18.64	18.61	18.53
		RB1#3	22.28	22.46	22.33	18.63	18.81	18.68
		RB1#5	22.15	22.29	22.00	18.50	18.64	18.35
		RB3#0	21.39	21.45	21.34	17.74	17.80	17.69
		RB3#3	21.40	21.47	21.18	17.75	17.82	17.53
		RB6#0	21.27	21.25	21.16	17.62	17.60	17.51
	16QAM	RB1#0	22.19	21.43	21.77	18.54	17.78	18.12
		RB1#3	21.89	21.63	21.69	18.24	17.98	18.04
		RB1#5	22.11	21.36	21.51	18.46	17.71	17.86
		RB3#0	20.35	20.50	20.24	16.70	16.85	16.59
		RB3#3	20.32	20.60	20.30	16.67	16.95	16.65
		RB6#0	20.34	20.36	20.38	16.69	16.71	16.73
3.0	QPSK	RB1#0	22.24	22.26	21.99	18.59	18.61	18.34
		RB1#8	22.59	22.71	22.31	18.94	19.06	18.66
		RB1#14	22.14	22.14	21.92	18.49	18.49	18.27
		RB6#0	21.49	21.49	21.54	17.84	17.84	17.89
		RB6#9	21.39	21.41	21.49	17.74	17.76	17.84
		RB15#0	21.27	21.55	21.49	17.62	17.90	17.84
	16QAM	RB1#0	21.43	21.56	21.68	17.78	17.91	18.03
		RB1#8	22.06	21.84	21.91	18.41	18.19	18.26
		RB1#14	21.57	21.49	21.48	17.92	17.84	17.83
		RB6#0	20.29	20.46	20.69	16.64	16.81	17.04
		RB6#9	20.48	20.62	20.43	16.83	16.97	16.78
		RB15#0	20.42	20.51	20.52	16.77	16.86	16.87

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	22.20	22.19	22.12	18.55	18.54	18.47
		RB1#13	22.23	22.13	22.20	18.58	18.48	18.55
		RB1#24	21.94	22.12	22.08	18.29	18.47	18.43
		RB15#0	21.16	21.23	21.16	17.51	17.58	17.51
		RB15#10	21.17	21.08	21.01	17.52	17.43	17.36
		RB25#0	21.27	21.32	21.06	17.62	17.67	17.41
	16QAM	RB1#0	21.90	21.37	21.51	18.25	17.72	17.86
		RB1#13	21.92	21.39	21.36	18.27	17.74	17.71
		RB1#24	21.82	21.25	21.38	18.17	17.60	17.73
		RB15#0	20.26	20.26	20.17	16.61	16.61	16.52
		RB15#10	20.19	20.30	20.10	16.54	16.65	16.45
		RB25#0	20.29	20.27	20.26	16.64	16.62	16.61
10.0	QPSK	RB1#0	22.01	22.01	21.72	18.36	18.36	18.07
		RB1#25	22.36	22.50	22.15	18.71	18.85	18.50
		RB1#49	21.89	22.03	21.64	18.24	18.38	17.99
		RB25#0	21.01	21.51	21.30	17.36	17.86	17.65
		RB25#25	21.31	21.38	21.22	17.66	17.73	17.57
		RB50#0	21.18	21.47	21.11	17.53	17.82	17.46
	16QAM	RB1#0	21.45	21.33	21.48	17.80	17.68	17.83
		RB1#25	21.60	21.58	21.83	17.95	17.93	18.18
		RB1#49	21.53	21.12	21.42	17.88	17.47	17.77
		RB25#0	20.11	20.39	20.40	16.46	16.74	16.75
		RB25#25	20.19	20.48	20.20	16.54	16.83	16.55
		RB50#0	20.07	20.29	20.33	16.42	16.64	16.68

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	15.62	15.86	15.62	15.22	15.46	15.22
		RB1#12	15.91	15.85	15.76	15.51	15.45	15.36
		RB1#24	15.62	15.85	15.45	15.22	15.45	15.05
		RB12#0	14.65	15.01	14.69	14.25	14.61	14.29
		RB12#6	14.77	14.89	14.72	14.37	14.49	14.32
		RB12#11	14.80	14.91	14.72	14.40	14.51	14.32
		RB25#0	15.44	14.99	15.31	15.04	14.59	14.91
	16QAM	RB1#0	15.43	15.04	14.95	15.03	14.64	14.55
		RB1#12	15.47	14.88	14.89	15.07	14.48	14.49
		RB1#24	13.90	13.87	13.74	13.50	13.47	13.34
		RB12#0	13.76	13.88	13.59	13.36	13.48	13.19
		RB12#6	13.63	13.89	13.56	13.23	13.49	13.16
		RB12#11	15.68	15.67	15.42	15.28	15.27	15.02
		RB25#0	15.96	16.15	15.63	15.56	15.75	15.23
10.0	QPSK	RB1#0	15.68	15.69	15.27	15.28	15.29	14.87
		RB1#24	14.87	14.83	15.03	14.47	14.43	14.63
		RB1#49	14.79	14.87	14.59	14.39	14.47	14.19
		RB25#0	14.77	14.94	14.74	14.37	14.54	14.34
		RB25#12	14.84	14.84	15.06	14.44	14.44	14.66
		RB25#24	15.37	15.20	15.43	14.97	14.80	15.03
		RB50#0	15.02	14.98	14.96	14.62	14.58	14.56
	16QAM	RB1#0	13.74	14.15	13.96	13.34	13.75	13.56
		RB1#24	13.78	13.94	13.66	13.38	13.54	13.26
		RB1#49	13.74	14.04	13.92	13.34	13.64	13.52
		RB25#0	15.62	15.86	15.62	15.22	15.46	15.22
		RB25#12	15.91	15.85	15.76	15.51	15.45	15.36
		RB25#24	15.62	15.85	15.45	15.22	15.45	15.05
		RB50#0	14.65	15.01	14.69	14.25	14.61	14.29

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	15.80	15.94	15.76	15.40	15.54	15.36
		RB1#37	16.11	16.09	15.90	15.71	15.69	15.50
		RB1#74	15.87	15.79	15.60	15.47	15.39	15.20
		RB36#0	14.92	15.06	14.92	14.52	14.66	14.52
		RB36#18	15.04	15.17	14.79	14.64	14.77	14.39
		RB36#37	14.97	15.03	14.80	14.57	14.63	14.40
		RB75#0	15.53	15.18	15.43	15.13	14.78	15.03
	16QAM	RB1#0	15.58	15.21	15.40	15.18	14.81	15.00
		RB1#37	15.69	15.13	15.07	15.29	14.73	14.67
		RB1#74	13.98	14.06	13.92	13.58	13.66	13.52
		RB36#0	13.91	14.25	13.78	13.51	13.85	13.38
		RB36#18	13.99	14.00	14.00	13.59	13.60	13.60
		RB36#37	15.68	15.99	15.68	15.28	15.59	15.28
		RB75#0	15.98	16.27	16.04	15.58	15.87	15.64
20.0	QPSK	RB1#0	15.87	15.72	15.39	15.47	15.32	14.99
		RB1#49	14.80	15.30	15.21	14.40	14.90	14.81
		RB1#99	15.02	15.21	15.02	14.62	14.81	14.62
		RB50#0	15.04	15.24	14.88	14.64	14.84	14.48
		RB50#24	15.05	15.15	15.17	14.65	14.75	14.77
		RB50#49	15.61	15.45	15.51	15.21	15.05	15.11
		RB100#0	15.23	15.00	15.03	14.83	14.60	14.63
	16QAM	RB1#0	13.86	14.21	14.20	13.46	13.81	13.80
		RB1#49	13.96	14.34	14.01	13.56	13.94	13.61
		RB1#99	14.03	14.19	14.05	13.63	13.79	13.65
		RB50#0	15.80	15.94	15.76	15.40	15.54	15.36
		RB50#24	16.11	16.09	15.90	15.71	15.69	15.50
		RB50#49	15.87	15.79	15.60	15.47	15.39	15.20
		RB100#0	14.92	15.06	14.92	14.52	14.66	14.52

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band7: Antenna Gain = -0.40dBi
Limit: EIRP ≤ 33dBm

LTE Band 12

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	22.27	22.14	17.92	18.22	18.09
		RB1#3	22.15	22.37	22.08	18.10	18.32	18.03
		RB1#5	22.04	22.12	21.81	17.99	18.07	17.76
		RB3#0	21.04	21.23	21.22	16.99	17.18	17.17
		RB3#3	21.13	21.33	20.97	17.08	17.28	16.92
		RB6#0	21.31	21.31	21.15	17.26	17.26	17.10
	16QAM	RB1#0	21.80	21.51	21.53	17.75	17.46	17.48
		RB1#3	21.87	21.47	21.56	17.82	17.42	17.51
		RB1#5	21.92	21.26	21.46	17.87	17.21	17.41
		RB3#0	20.10	20.41	20.08	16.05	16.36	16.03
		RB3#3	20.35	20.31	19.98	16.30	16.26	15.93
		RB6#0	20.15	20.28	20.21	16.10	16.23	16.16
3.0	QPSK	RB1#0	22.00	22.20	21.87	17.95	18.15	17.82
		RB1#8	22.48	22.31	22.20	18.43	18.26	18.15
		RB1#14	22.00	21.92	21.73	17.95	17.87	17.68
		RB6#0	21.14	21.39	21.32	17.09	17.34	17.27
		RB6#9	21.24	21.31	21.15	17.19	17.26	17.10
		RB15#0	21.13	21.20	21.28	17.08	17.15	17.23
	16QAM	RB1#0	21.40	21.17	21.40	17.35	17.12	17.35
		RB1#8	21.75	21.50	21.65	17.70	17.45	17.60
		RB1#14	21.30	21.10	21.29	17.25	17.05	17.24
		RB6#0	20.20	20.32	20.28	16.15	16.27	16.23
		RB6#9	20.16	20.41	20.09	16.11	16.36	16.04
		RB15#0	20.21	20.48	20.15	16.16	16.43	16.10

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	22.12	22.37	22.17	18.07	18.32	18.12
		RB1#13	22.23	22.41	22.02	18.18	18.36	17.97
		RB1#24	22.11	22.18	22.17	18.06	18.13	18.12
		RB15#0	21.31	21.21	21.40	17.26	17.16	17.35
		RB15#10	21.27	21.33	21.27	17.22	17.28	17.22
		RB25#0	21.34	21.42	21.11	17.29	17.37	17.06
	16QAM	RB1#0	21.92	21.40	21.76	17.87	17.35	17.71
		RB1#13	22.11	21.60	21.62	18.06	17.55	17.57
		RB1#24	21.83	21.31	21.45	17.78	17.26	17.40
		RB15#0	20.41	20.42	20.18	16.36	16.37	16.13
		RB15#10	20.42	20.27	20.14	16.37	16.22	16.09
		RB25#0	20.36	20.45	20.34	16.31	16.40	16.29
10.0	QPSK	RB1#0	22.01	22.18	21.90	17.96	18.13	17.85
		RB1#25	22.46	22.40	22.38	18.41	18.35	18.33
		RB1#49	22.06	22.20	21.81	18.01	18.15	17.76
		RB25#0	21.36	21.46	21.43	17.31	17.41	17.38
		RB25#25	21.15	21.43	21.27	17.10	17.38	17.22
		RB50#0	21.30	21.37	21.36	17.25	17.32	17.31
	16QAM	RB1#0	21.38	21.47	21.59	17.33	17.42	17.54
		RB1#25	21.78	21.68	21.90	17.73	17.63	17.85
		RB1#49	21.61	21.26	21.54	17.56	17.21	17.49
		RB25#0	20.37	20.59	20.59	16.32	16.54	16.54
		RB25#25	20.28	20.61	20.39	16.23	16.56	16.34
		RB50#0	20.34	20.64	20.35	16.29	16.59	16.30

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 13:

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	RB1#0	21.68	21.82	21.49	17.63	17.77	17.44
		RB1#13	21.73	21.87	21.45	17.68	17.82	17.40
		RB1#24	21.69	21.59	21.49	17.64	17.54	17.44
		RB15#0	20.69	20.75	20.81	16.64	16.70	16.76
		RB15#10	20.76	20.74	20.59	16.71	16.69	16.54
		RB25#0	20.72	20.69	20.58	16.67	16.64	16.53
	16QAM	RB1#0	21.26	20.81	21.04	17.21	16.76	16.99
		RB1#13	21.30	20.98	21.13	17.25	16.93	17.08
		RB1#24	21.35	20.88	20.70	17.30	16.83	16.65
		RB15#0	19.68	19.77	19.63	15.63	15.72	15.58
		RB15#10	19.68	19.79	19.45	15.63	15.74	15.40
		RB25#0	19.83	19.85	19.57	15.78	15.80	15.52
10	QPSK	RB1#0	/	21.75	/	/	17.70	/
		RB1#25	/	21.75	/	/	17.70	/
		RB1#49	/	21.51	/	/	17.46	/
		RB25#0	/	20.89	/	/	16.84	/
		RB25#25	/	20.85	/	/	16.80	/
		RB50#0	/	20.87	/	/	16.82	/
	16QAM	RB1#0	/	20.88	/	/	16.83	/
		RB1#25	/	21.18	/	/	17.13	/
		RB1#49	/	20.74	/	/	16.69	/
		RB25#0	/	19.80	/	/	15.75	/
		RB25#25	/	19.88	/	/	15.83	/
		RB50#0	/	20.03	/	/	15.98	/

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd)
For Band13: Antenna Gain = -1.9dBi = -4.05dBd (0dBd=2.15dBi)
Limit: ERP ≤ 34.77dBm

LTE Band17

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	22.16	22.08	21.88	18.11	18.03	17.83
		RB1#12	22.10	22.12	21.90	18.05	18.07	17.85
		RB1#24	21.93	22.01	21.84	17.88	17.96	17.79
		RB12#0	21.13	21.20	20.94	17.08	17.15	16.89
		RB12#6	21.07	21.06	20.93	17.02	17.01	16.88
		RB12#11	21.00	21.06	21.11	16.95	17.01	17.06
		RB25#0	21.71	21.19	21.51	17.66	17.14	17.46
	16QAM	RB1#0	21.66	21.31	21.33	17.61	17.26	17.28
		RB1#12	21.72	21.24	21.28	17.67	17.19	17.23
		RB1#24	19.99	20.11	20.02	15.94	16.06	15.97
		RB12#0	20.06	20.20	20.02	16.01	16.15	15.97
		RB12#6	20.21	20.32	19.97	16.16	16.27	15.92
		RB12#11	21.86	22.05	21.75	17.81	18.00	17.70
		RB25#0	22.12	22.37	22.02	18.07	18.32	17.97
10.0	QPSK	RB1#0	21.95	21.95	21.59	17.90	17.90	17.54
		RB1#24	21.10	21.22	21.18	17.05	17.17	17.13
		RB1#49	21.05	21.23	20.90	17.00	17.18	16.85
		RB25#0	21.23	21.21	21.00	17.18	17.16	16.95
		RB25#12	21.24	21.14	21.29	17.19	17.09	17.24
		RB25#24	21.64	21.46	21.72	17.59	17.41	17.67
		RB50#0	21.34	21.17	21.24	17.29	17.12	17.19
	16QAM	RB1#0	20.11	20.31	20.34	16.06	16.26	16.29
		RB1#24	19.97	20.26	19.96	15.92	16.21	15.91
		RB1#49	20.08	20.32	20.17	16.03	16.27	16.12
		RB25#0	22.16	22.08	21.88	18.11	18.03	17.83
		RB25#12	22.10	22.12	21.90	18.05	18.07	17.85
		RB25#24	21.93	22.01	21.84	17.88	17.96	17.79
		RB50#0	21.13	21.20	20.94	17.08	17.15	16.89

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	QP SK	RB1#0	18.58	18.62	18.59	18.18	18.22	18.19
		RB1#13	18.69	18.68	18.64	18.29	18.28	18.24
		RB1#24	18.62	18.58	18.57	18.22	18.18	18.17
		RB15#0	17.61	17.64	17.64	17.21	17.24	17.24
		RB15#10	17.63	17.59	17.59	17.23	17.19	17.19
		RB25#0	17.63	17.62	17.63	17.23	17.22	17.23
	16QAM	RB1#0	17.67	17.85	17.54	17.27	17.45	17.14
		RB1#13	17.78	17.94	17.66	17.38	17.54	17.26
		RB1#24	17.69	17.81	17.56	17.29	17.41	17.16
		RB15#0	16.69	16.74	16.61	16.29	16.34	16.21
		RB15#10	16.72	16.72	16.56	16.32	16.32	16.16
		RB25#0	16.71	16.66	16.67	16.31	16.26	16.27
10.0	QPSK	RB1#0	18.53	18.71	18.67	18.13	18.31	18.27
		RB1#25	18.94	18.98	18.96	18.54	18.58	18.56
		RB1#49	18.66	18.69	18.63	18.26	18.29	18.23
		RB25#0	17.64	17.65	17.62	17.24	17.25	17.22
		RB25#25	17.62	17.65	17.61	17.22	17.25	17.21
		RB50#0	17.67	17.65	17.60	17.27	17.25	17.20
	16QAM	RB1#0	17.87	17.64	17.75	17.47	17.24	17.35
		RB1#25	18.16	17.89	18.03	17.76	17.49	17.63
		RB1#49	17.89	17.58	17.74	17.49	17.18	17.34
		RB25#0	16.61	16.74	16.68	16.21	16.34	16.28
		RB25#25	16.68	16.73	16.67	16.28	16.33	16.27
		RB50#0	16.69	16.68	16.67	16.29	16.28	16.27

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	18.61	18.62	18.59	18.21	18.22	18.19
		RB1#38	18.69	18.73	18.70	18.29	18.33	18.30
		RB1#74	18.55	18.55	18.55	18.15	18.15	18.15
		RB36#0	17.65	17.70	17.65	17.25	17.30	17.25
		RB36#39	17.65	17.68	17.64	17.25	17.28	17.24
		RB75#0	17.64	17.68	17.65	17.24	17.28	17.25
	16QAM	RB1#0	17.80	17.58	17.82	17.40	17.18	17.42
		RB1#38	17.92	17.70	17.91	17.52	17.30	17.51
		RB1#74	17.78	17.53	17.78	17.38	17.13	17.38
		RB36#0	16.71	16.64	16.74	16.31	16.24	16.34
		RB36#39	16.73	16.66	16.71	16.33	16.26	16.31
		RB75#0	16.65	16.73	16.67	16.25	16.33	16.27
20.0	QPSK	RB1#0	18.42	18.42	18.53	18.02	18.02	18.13
		RB1#50	18.94	18.94	18.99	18.54	18.54	18.59
		RB1#99	18.40	18.37	18.45	18.00	17.97	18.05
		RB50#0	17.67	17.66	17.64	17.27	17.26	17.24
		RB50#50	17.70	17.63	17.65	17.30	17.23	17.25
		RB100#0	17.66	17.68	17.62	17.26	17.28	17.22
	16QAM	RB1#0	17.50	17.44	17.72	17.10	17.04	17.32
		RB1#50	18.02	17.93	18.21	17.62	17.53	17.81
		RB1#99	17.49	17.36	17.69	17.09	16.96	17.29
		RB50#0	16.74	16.75	16.71	16.34	16.35	16.31
		RB50#50	16.72	16.78	16.69	16.32	16.38	16.29
		RB100#0	16.71	16.73	16.69	16.31	16.33	16.29

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band38: Antenna Gain = -0.40dBi
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	QP SK	RB1#0	18.17	18.45	18.18	17.77	18.05	17.78
		RB1#13	18.27	18.52	18.30	17.87	18.12	17.90
		RB1#24	18.18	18.44	18.10	17.78	18.04	17.70
		RB15#0	17.15	17.43	17.23	16.75	17.03	16.83
		RB15#10	17.20	17.45	17.16	16.80	17.05	16.76
		RB25#0	17.19	17.43	17.22	16.79	17.03	16.82
	16QAM	RB1#0	17.14	17.50	17.41	16.74	17.10	17.01
		RB1#13	17.26	17.60	17.53	16.86	17.20	17.13
		RB1#24	17.19	17.49	17.50	16.79	17.09	17.10
		RB15#0	16.14	16.52	16.32	15.74	16.12	15.92
		RB15#10	16.19	16.51	16.27	15.79	16.11	15.87
		RB25#0	16.24	16.54	16.26	15.84	16.14	15.86
10.0	QPSK	RB1#0	18.24	18.57	18.39	17.84	18.17	17.99
		RB1#25	18.58	18.88	18.66	18.18	18.48	18.26
		RB1#49	18.33	18.53	18.27	17.93	18.13	17.87
		RB25#0	17.22	17.48	17.37	16.82	17.08	16.97
		RB25#25	17.32	17.52	17.24	16.92	17.12	16.84
		RB50#0	17.28	17.50	17.30	16.88	17.10	16.90
	16QAM	RB1#0	17.46	17.49	17.47	17.06	17.09	17.07
		RB1#25	17.81	17.78	17.73	17.41	17.38	17.33
		RB1#49	17.55	17.42	17.36	17.15	17.02	16.96
		RB25#0	16.26	16.61	16.45	15.86	16.21	16.05
		RB25#25	16.35	16.60	16.34	15.95	16.20	15.94
		RB50#0	16.30	16.55	16.38	15.90	16.15	15.98

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	18.22	18.49	18.37	17.82	18.09	17.97
		RB1#38	18.41	18.58	18.37	18.01	18.18	17.97
		RB1#74	18.32	18.43	18.16	17.92	18.03	17.76
		RB36#0	17.26	17.50	17.41	16.86	17.10	17.01
		RB36#39	17.38	17.51	17.29	16.98	17.11	16.89
		RB75#0	17.28	17.53	17.36	16.88	17.13	16.96
	16QAM	RB1#0	17.43	17.47	17.58	17.03	17.07	17.18
		RB1#38	17.60	17.54	17.58	17.20	17.14	17.18
		RB1#74	17.49	17.39	17.42	17.09	16.99	17.02
		RB36#0	16.26	16.49	16.46	15.86	16.09	16.06
		RB36#39	16.41	16.49	16.36	16.01	16.09	15.96
		RB75#0	16.25	16.56	16.39	15.85	16.16	15.99
20.0	QPSK	RB1#0	18.04	18.31	18.32	17.64	17.91	17.92
		RB1#50	18.61	18.75	18.72	18.21	18.35	18.32
		RB1#99	18.20	18.23	18.14	17.80	17.83	17.74
		RB50#0	17.21	17.47	17.45	16.81	17.07	17.05
		RB50#50	17.40	17.47	17.24	17.00	17.07	16.84
		RB100#0	17.29	17.48	17.37	16.89	17.08	16.97
	16QAM	RB1#0	17.10	17.29	17.57	16.70	16.89	17.17
		RB1#50	17.69	17.75	17.92	17.29	17.35	17.52
		RB1#99	17.27	17.23	17.34	16.87	16.83	16.94
		RB50#0	16.26	16.58	16.53	15.86	16.18	16.13
		RB50#50	16.45	16.58	16.33	16.05	16.18	15.93
		RB100#0	16.34	16.53	16.43	15.94	16.13	16.03

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band41: Antenna Gain = -0.40dBi
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	QP SK	RB1#0	16.44	16.42	16.24	15.74	15.72	15.54
		RB1#3	16.54	16.53	16.36	15.84	15.83	15.66
		RB1#5	16.46	16.38	16.24	15.76	15.68	15.54
		RB3#0	16.71	16.58	16.45	16.01	15.88	15.75
		RB3#3	16.59	16.59	16.37	15.89	15.89	15.67
		RB6#0	15.50	15.47	15.26	14.80	14.77	14.56
	16QAM	RB1#0	15.60	15.47	15.36	14.90	14.77	14.66
		RB1#3	15.77	15.63	15.32	15.07	14.93	14.62
		RB1#5	15.65	15.51	15.25	14.95	14.81	14.55
		RB3#0	15.56	15.72	15.63	14.86	15.02	14.93
		RB3#3	15.72	15.74	15.67	15.02	15.04	14.97
		RB6#0	14.53	14.45	14.30	13.83	13.75	13.60
3.0	QPSK	RB1#0	16.39	16.46	16.20	15.69	15.76	15.50
		RB1#8	16.37	16.44	16.16	15.67	15.74	15.46
		RB1#14	16.28	16.41	16.20	15.58	15.71	15.50
		RB6#0	15.34	15.38	15.18	14.64	14.68	14.48
		RB6#9	15.32	15.38	15.15	14.62	14.68	14.45
		RB15#0	15.41	15.43	15.22	14.71	14.73	14.52
	16QAM	RB1#0	16.12	15.64	15.31	15.42	14.94	14.61
		RB1#8	16.06	15.64	15.24	15.36	14.94	14.54
		RB1#14	16.01	15.60	15.33	15.31	14.90	14.63
		RB6#0	14.48	14.45	14.13	13.78	13.75	13.43
		RB6#9	14.43	14.47	14.10	13.73	13.77	13.40
		RB15#0	14.48	14.46	14.28	13.78	13.76	13.58

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QP SK	RB1#0	16.37	16.44	16.17	15.67	15.74	15.47
		RB1#13	16.40	16.47	16.25	15.70	15.77	15.55
		RB1#24	16.31	16.39	16.13	15.61	15.69	15.43
		RB15#0	15.35	15.45	15.26	14.65	14.75	14.56
		RB15#10	15.45	15.45	15.21	14.75	14.75	14.51
		RB25#0	15.36	15.45	15.22	14.66	14.75	14.52
	16QAM	RB1#0	15.29	15.76	15.30	14.59	15.06	14.60
		RB1#13	15.30	15.80	15.34	14.60	15.10	14.64
		RB1#24	15.23	15.69	15.24	14.53	14.99	14.54
		RB15#0	14.44	14.47	14.31	13.74	13.77	13.61
		RB15#10	14.46	14.51	14.27	13.76	13.81	13.57
		RB25#0	14.46	14.51	14.24	13.76	13.81	13.54
10.0	QPSK	RB1#0	16.37	16.48	16.29	15.67	15.78	15.59
		RB1#25	16.38	16.58	16.38	15.68	15.88	15.68
		RB1#49	16.31	16.40	16.17	15.61	15.70	15.47
		RB25#0	15.36	15.51	15.32	14.66	14.81	14.62
		RB25#25	15.44	15.52	15.25	14.74	14.82	14.55
		RB50#0	15.42	15.51	15.30	14.72	14.81	14.60
	16QAM	RB1#0	16.10	15.67	15.32	15.40	14.97	14.62
		RB1#25	16.18	15.79	15.42	15.48	15.09	14.72
		RB1#49	16.05	15.58	15.18	15.35	14.88	14.48
		RB25#0	14.48	14.60	14.42	13.78	13.90	13.72
		RB25#25	14.54	14.57	14.40	13.84	13.87	13.70
		RB50#0	14.45	14.57	14.35	13.75	13.87	13.65

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	16.31	16.43	16.25	15.61	15.73	15.55
		RB1#38	16.38	16.46	16.25	15.68	15.76	15.55
		RB1#74	16.27	16.29	16.11	15.57	15.59	15.41
		RB36#0	15.35	15.49	15.34	14.65	14.79	14.64
		RB36#39	15.38	15.45	15.24	14.68	14.75	14.54
		RB75#0	15.35	15.44	15.30	14.65	14.74	14.60
	16QAM	RB1#0	16.02	15.61	15.76	15.32	14.91	15.06
		RB1#38	16.05	15.62	15.72	15.35	14.92	15.02
		RB1#74	16.04	15.46	15.55	15.34	14.76	14.85
		RB36#0	14.37	14.47	14.35	13.67	13.77	13.65
		RB36#39	14.41	14.50	14.26	13.71	13.80	13.56
		RB75#0	14.40	14.49	14.31	13.70	13.79	13.61
20.0	QPSK	RB1#0	16.15	16.29	16.04	15.45	15.59	15.34
		RB1#50	16.49	16.60	16.37	15.79	15.90	15.67
		RB1#99	16.22	16.15	15.88	15.52	15.45	15.18
		RB50#0	15.37	15.54	15.53	14.67	14.84	14.83
		RB50#50	15.39	15.52	15.33	14.69	14.82	14.63
		RB100#0	15.40	15.51	15.41	14.70	14.81	14.71
	16QAM	RB1#0	15.54	15.54	15.70	14.84	14.84	15.00
		RB1#50	15.89	15.81	15.98	15.19	15.11	15.28
		RB1#99	15.57	15.41	15.55	14.87	14.71	14.85
		RB50#0	14.39	14.57	14.57	13.69	13.87	13.87
		RB50#50	14.41	14.57	14.38	13.71	13.87	13.68
		RB100#0	14.41	14.58	14.46	13.71	13.88	13.76

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band66: Antenna Gain = -0.70dBi
Limit: EIRP ≤ 30dBm

Peak-to-average ratio (PAR)**LTE Band 2****20MHz Bandwidth**

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	5.48	5.87	5.54	13	Pass
QPSK (100RB Size)	8.46	5.80	5.58	13	Pass
16QAM (1RB Size)	8.52	6.96	6.67	13	Pass
16QAM (100RB Size)	6.51	6.47	6.51	13	Pass

LTE Band 4**20MHz Bandwidth**

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	5.96	5.64	6.19	13	Pass
QPSK (100RB Size)	5.80	5.74	5.80	13	Pass
16QAM (1RB Size)	7.60	6.25	7.37	13	Pass
16QAM (100RB Size)	6.76	6.76	6.70	13	Pass

LTE Band 5**10MHz Bandwidth**

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	5.00	4.78	4.65	13	Pass
QPSK (50RB Size)	5.67	5.54	5.61	13	Pass
16QAM (1RB Size)	5.87	6.09	5.61	13	Pass
16QAM (50RB Size)	6.41	6.41	6.51	13	Pass

LTE Band 7**20MHz Bandwidth**

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	5.58	5.71	6.09	13	Pass
QPSK (100RB Size)	5.61	5.77	5.67	13	Pass
16QAM (1RB Size)	6.35	7.44	7.34	13	Pass
16QAM (100RB Size)	6.47	6.47	6.54	13	Pass

LTE Band 12**10MHz Bandwidth**

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	5.38	4.81	5.71	13	Pass
QPSK (50RB Size)	5.80	5.83	5.77	13	Pass
16QAM (1RB Size)	6.12	5.90	6.38	13	Pass
16QAM (50RB Size)	6.67	6.76	6.67	13	Pass

LTE Band 13**10MHz Bandwidth**

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	/	5.29	/	13	Pass
QPSK (50RB Size)	/	5.58	/	13	Pass
16QAM (1RB Size)	/	6.22	/	13	Pass
16QAM (50RB Size)	/	6.44	/	13	Pass

LTE Band 17**10MHz Bandwidth**

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	5.35	5.35	5.29	13	Pass
QPSK (50RB Size)	5.93	5.74	5.71	13	Pass
16QAM (1RB Size)	6.41	6.79	6.25	13	Pass
16QAM (50RB Size)	6.63	6.51	6.60	13	Pass

LTE Band 38**20MHz Bandwidth**

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	8.97	8.06	7.31	13	Pass
QPSK (100RB Size)	7.98	8.04	7.95	13	Pass
16QAM (1RB Size)	7.08	8.33	9.74	13	Pass
16QAM (100RB Size)	8.14	8.72	8.26	13	Pass

LTE Band 41**20MHz Bandwidth**

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	9.97	7.63	7.82	13	Pass
QPSK (100RB Size)	8.11	7.34	9.29	13	Pass
16QAM (1RB Size)	8.33	9.42	9.47	13	Pass
16QAM (100RB Size)	9.10	8.10	8.69	13	Pass

LTE Band 66
20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	6.44	5.58	5.64	13	Pass
QPSK (100RB Size)	5.80	5.74	5.74	13	Pass
16QAM (1RB Size)	7.63	6.60	7.56	13	Pass
16QAM (100RB Size)	6.73	6.70	6.70	13	Pass

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

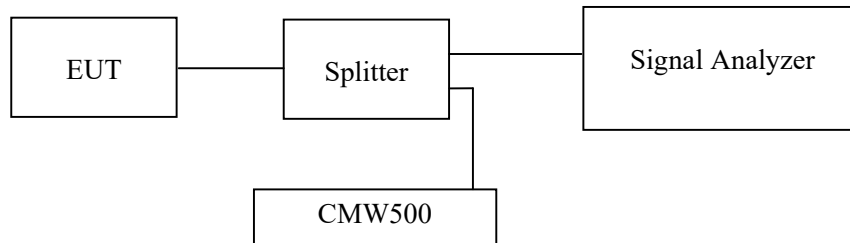
Applicable Standard

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:	27.1~27.3℃
Relative Humidity:	56~56.8 %
ATM Pressure:	101.0 kPa

The testing was performed by Roger Ling from 2022-06-28 to 2022-07-15.

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	246.00	319.00
	190	836.4	245.00	321.00
	251	848.8	246.00	320.00
EGPRS(8PSK)	128	824.2	248.00	310.00
	190	836.4	249.00	313.00
	251	848.8	248.00	325.00

	Frequency (MHz)	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
RMC	826.4	4.17	4.74
	836.4	4.17	4.73
	846.6	4.17	4.74
HSDPA	826.4	4.22	5.04
	836.4	4.23	5.13
	846.6	4.19	4.71
HSUPA	826.4	4.23	5.30
	836.4	4.23	5.12
	846.6	4.22	5.04

PCS Band (Part 24E)

Mode	Channel	Frequency (MHz)	99% Occupied Bandwidth (kHz)	26 dB Emission Bandwidth (kHz)
GSM (GMSK)	512	1850.2	246.00	313.00
	661	1880.0	245.00	315.00
	810	1909.8	245.00	317.00
EGPRS(8PSK)	512	1850.2	250.00	324.00
	661	1880.0	250.00	319.00
	810	1909.8	250.00	318.00

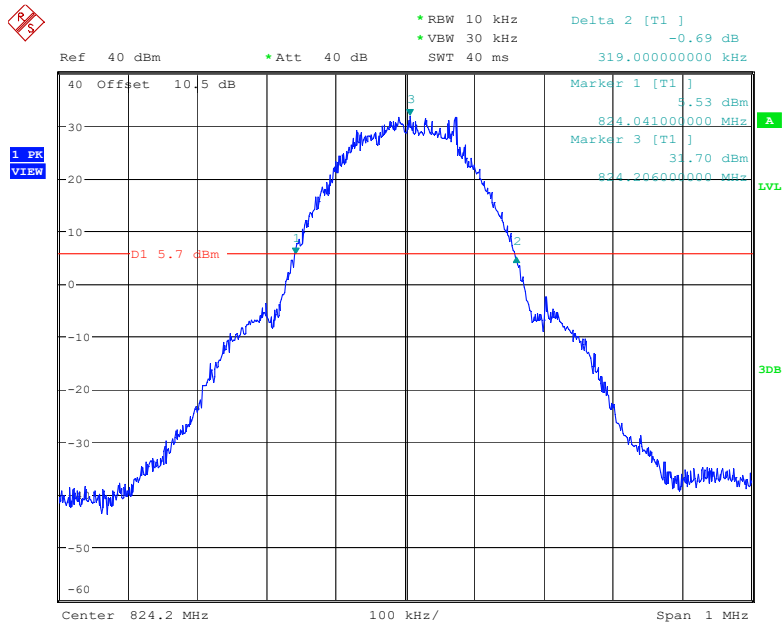
	Frequency (MHz)	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
RMC	1852.4	4.17	4.74
	1880.0	4.17	4.74
	1907.6	4.17	4.74
HSDPA	1852.4	4.17	4.71
	1880.0	4.19	4.74
	1907.6	4.18	4.76
HSUPA	1852.4	4.19	4.73
	1880.0	4.17	4.74
	1907.6	4.18	4.76

AWS Band (Part 27)

	Frequency (MHz)	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
RMC	1712.4	4.17	4.74
	1732.6	4.17	4.73
	1752.6	4.17	4.73
HSDPA	1712.4	4.19	4.73
	1732.6	4.20	4.74
	1752.6	4.19	4.73
HSUPA	1712.4	4.19	4.71
	1732.6	4.20	4.71
	1752.6	4.19	4.74

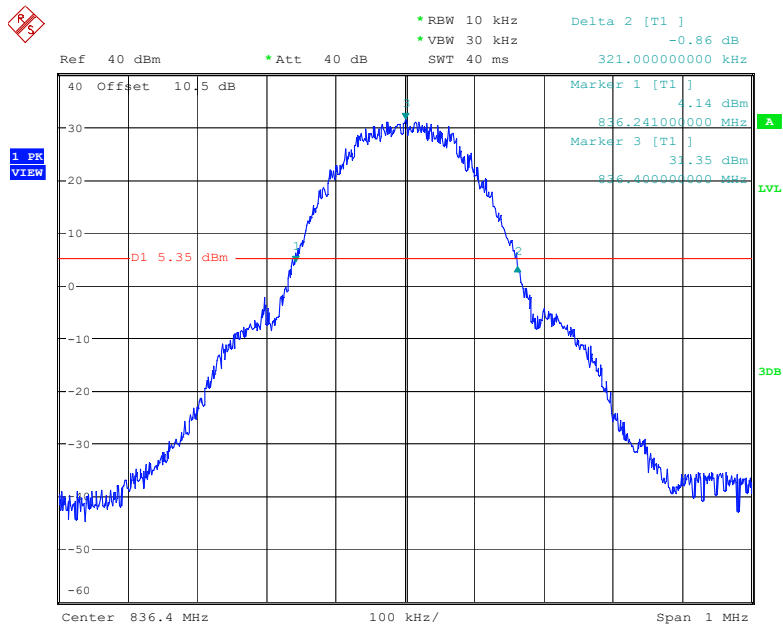
Cellular Band (Part 22H)

26 dB Emissions for GSM (GMSK) Mode, Low channel



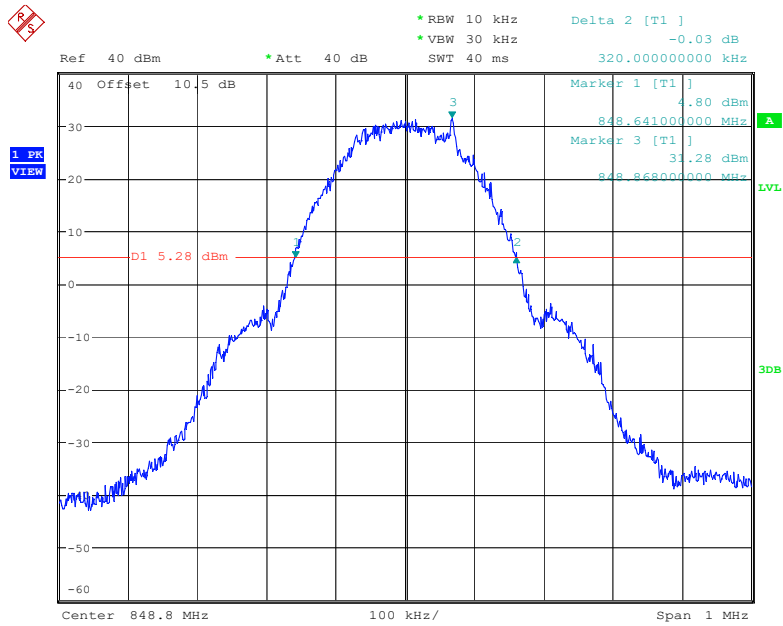
Date: 1.JUL.2022 16:31:15

26 dB Emissions for GSM (GMSK) Mode, Middle channel



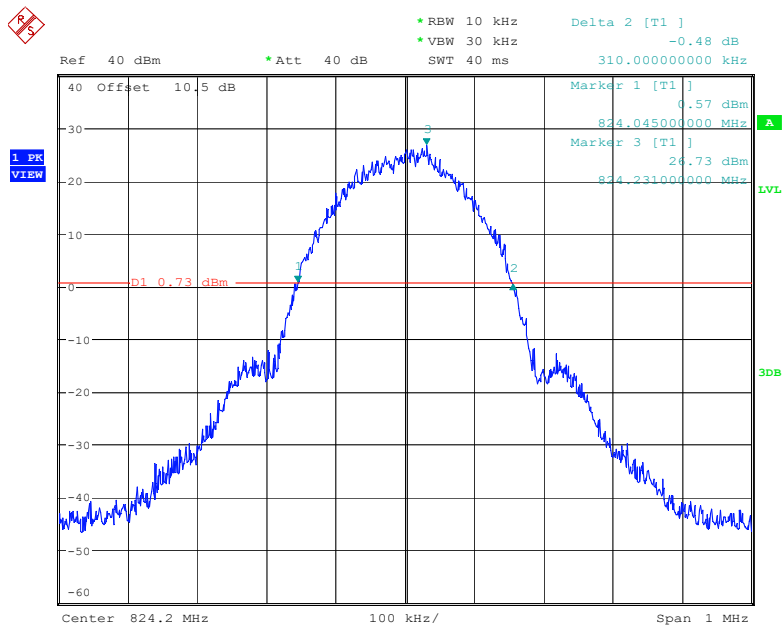
Date: 1.JUL.2022 16:35:43

26 dB Emissions for GSM (GMSK) Mode, High channel



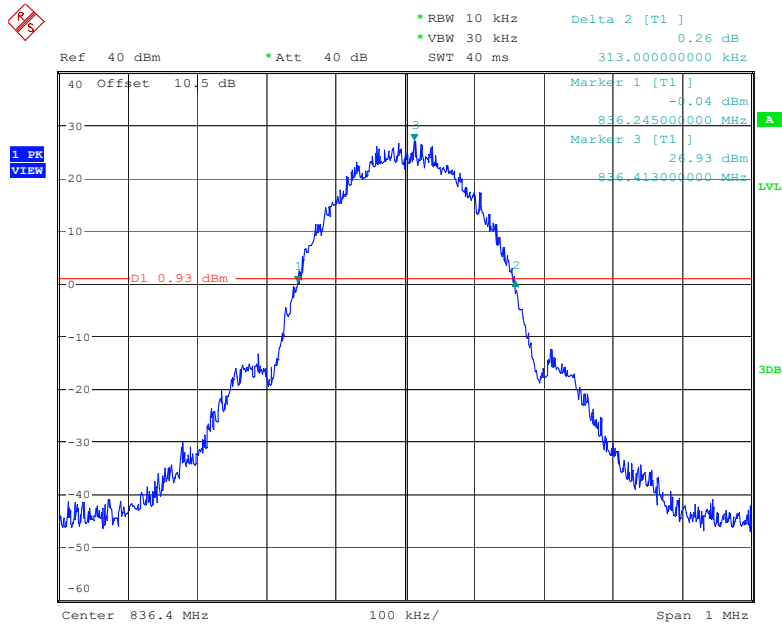
Date: 1.JUL.2022 16:38:10

26 dB Emissions for EGPRS (8PSK) Mode, Low channel



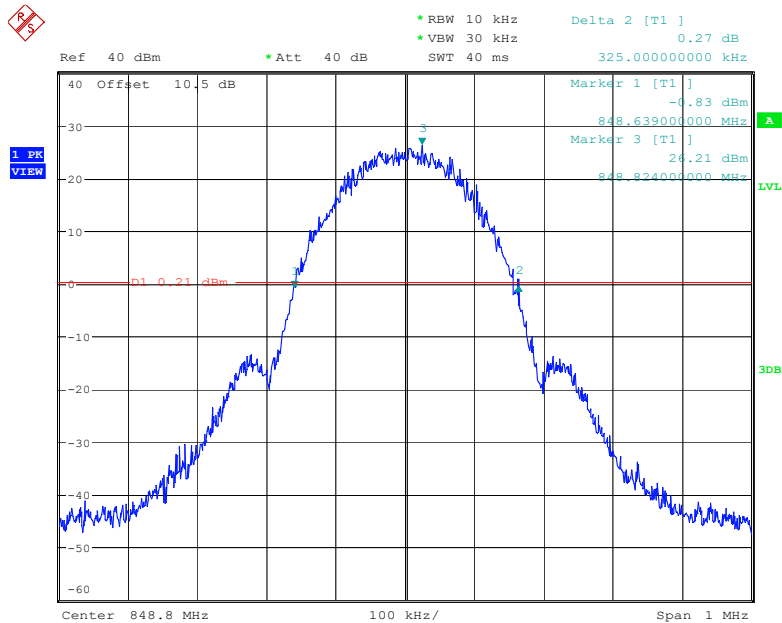
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26 dB Emissions for EGPRS (8PSK) Mode, Middle channel



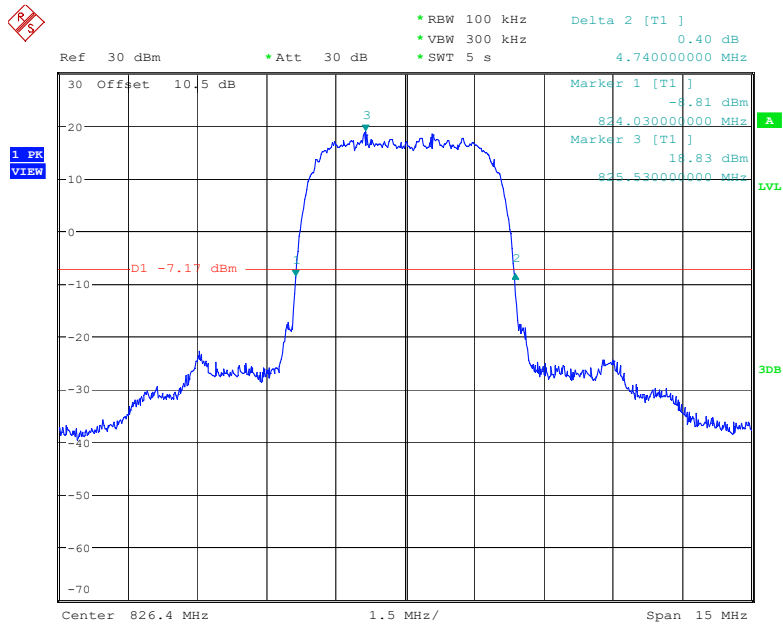
Date: 1.JUL.2022 16:25:40

26 dB Emissions for EGPRS (8PSK) Mode, High channel



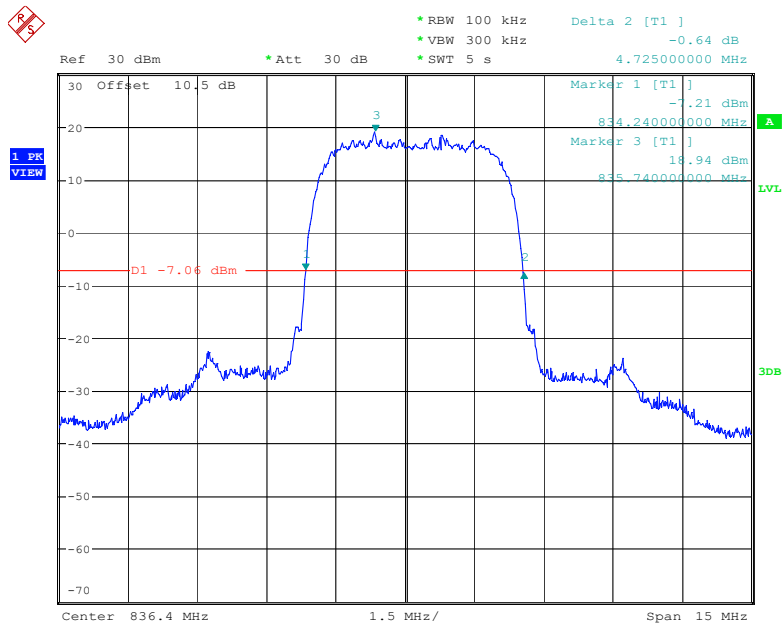
Date: 1.JUL.2022 16:27:54

26 dB Emissions for RMC (BPSK) Mode, Low channel



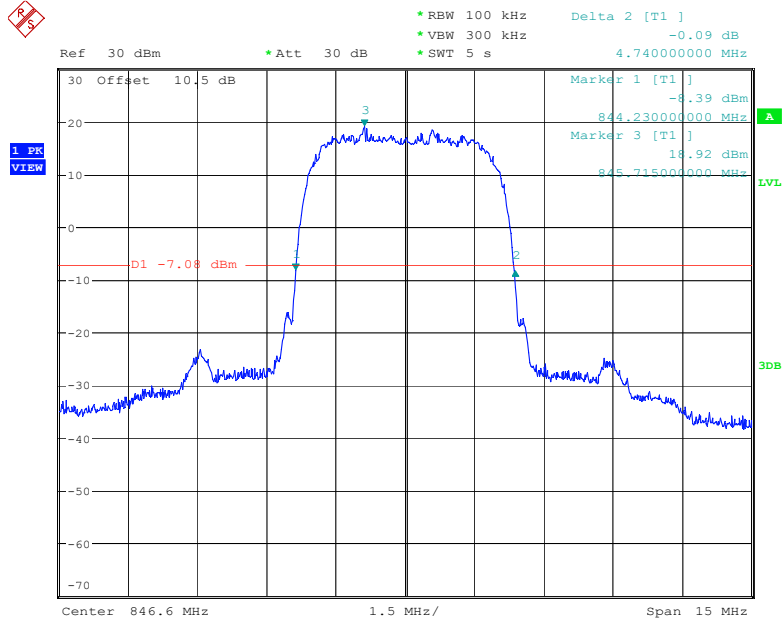
Date: 2.JUL.2022 10:00:01

26 dB Emissions for RMC (BPSK) Mode, Middle channel



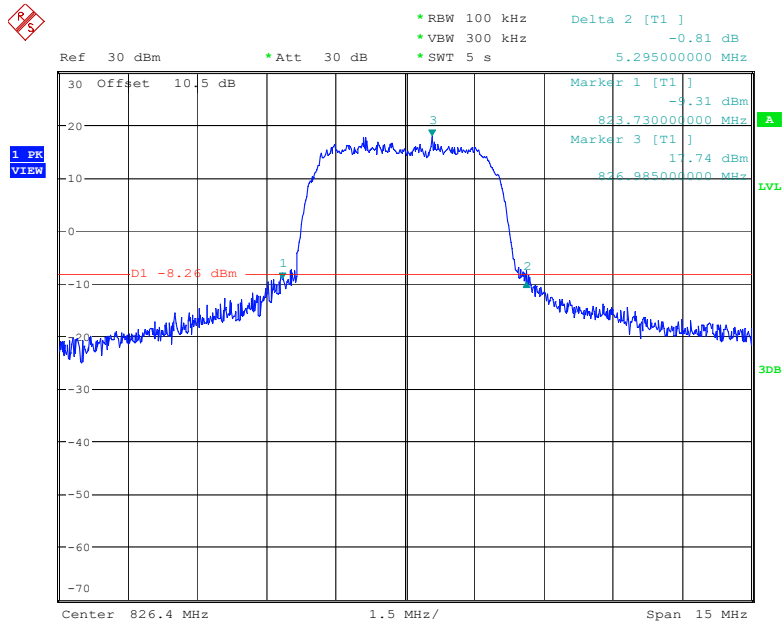
Date: 2.JUL.2022 10:03:12

26 dB Emissions for RMC (BPSK) Mode, High channel



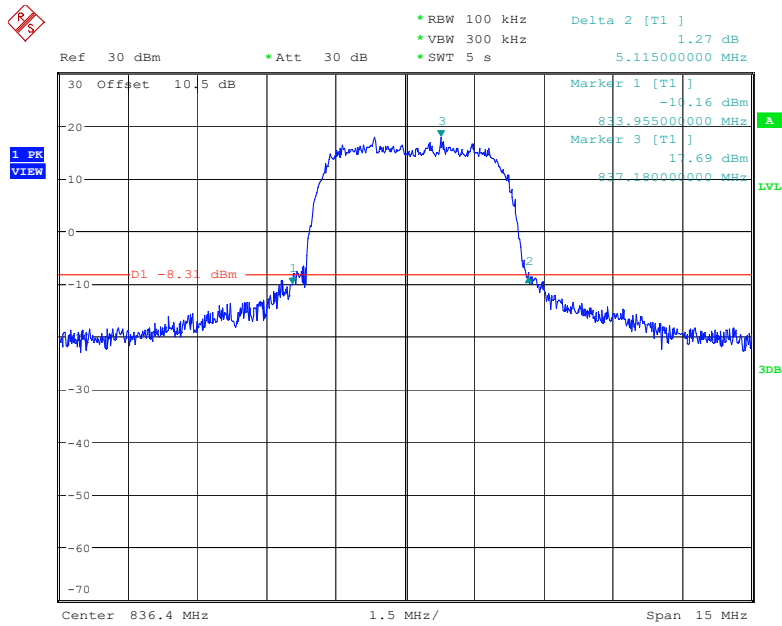
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26 dB Emissions for HSUPA (QPSK) Mode, Low channel



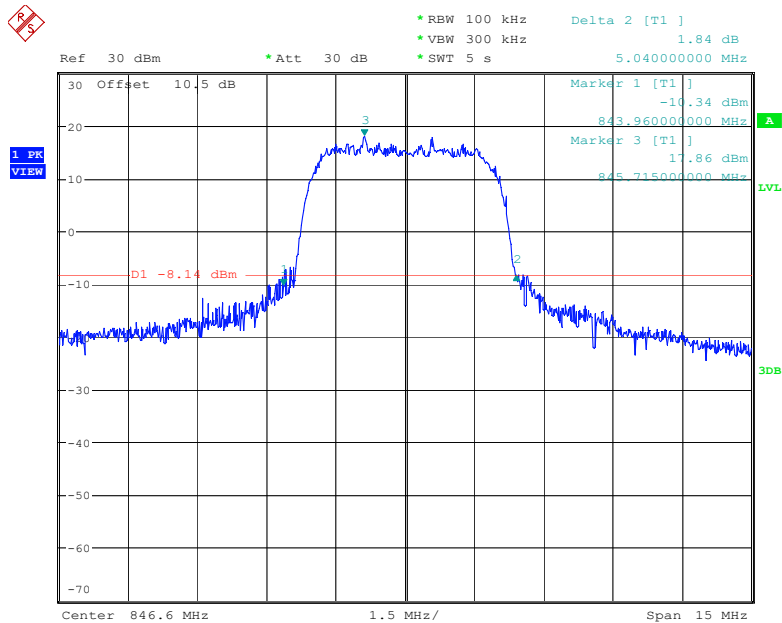
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26 dB Emissions for HSUPA (QPSK) Mode, Middle channel



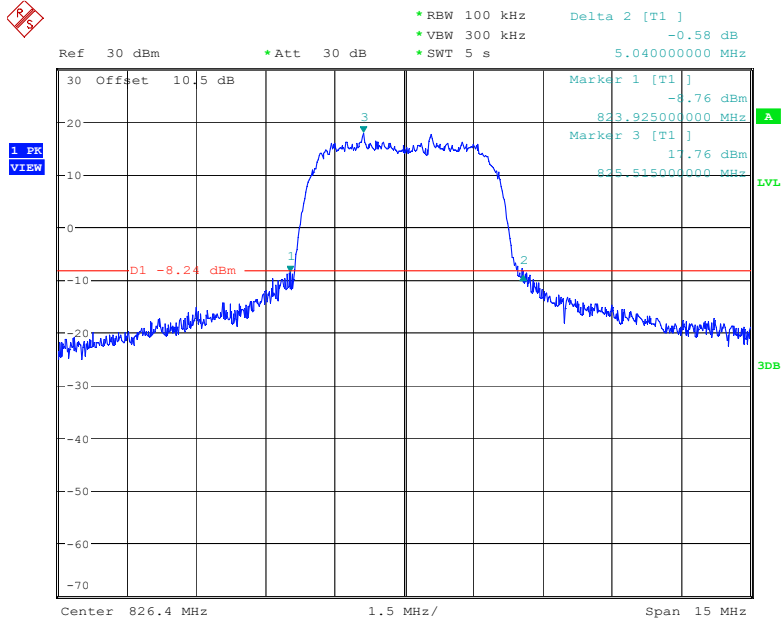
Date: 2.JUL.2022 10:15:56

26 dB Emissions for HSUPA (QPSK) Mode, High channel



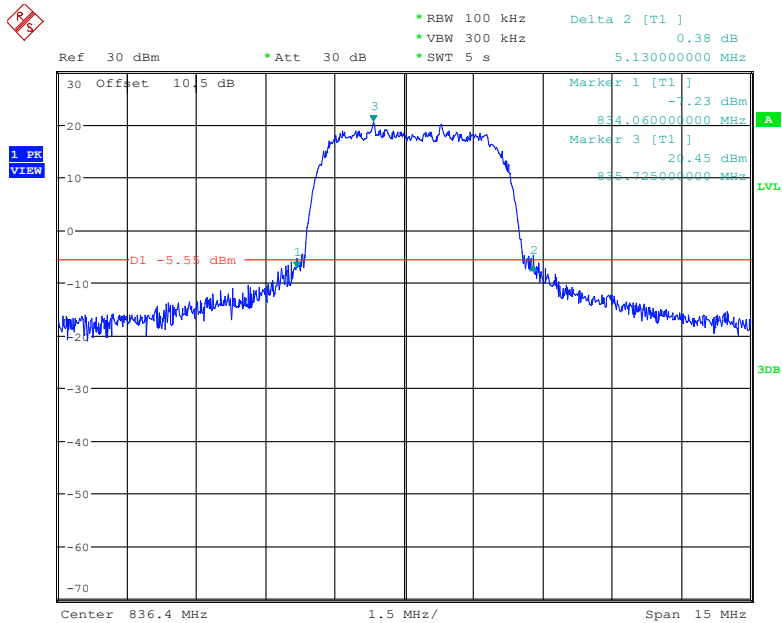
Date: 2.JUL.2022 10:18:24

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



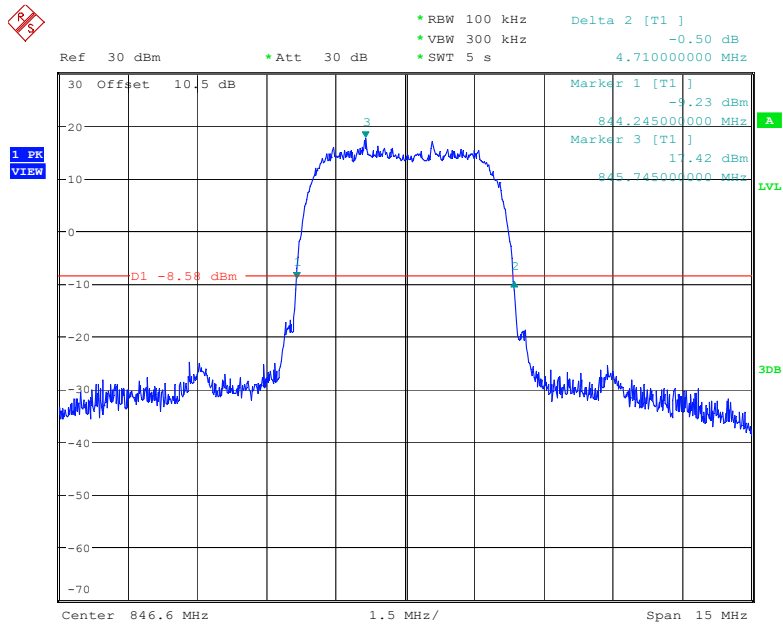
Date: 2.JUL.2022 10:25:09

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



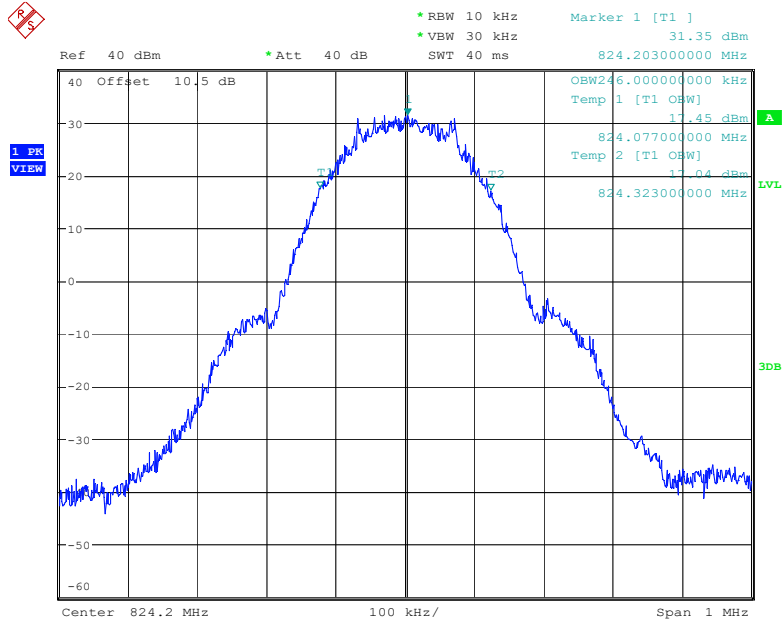
Date: 2.JUL.2022 18:38:53

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



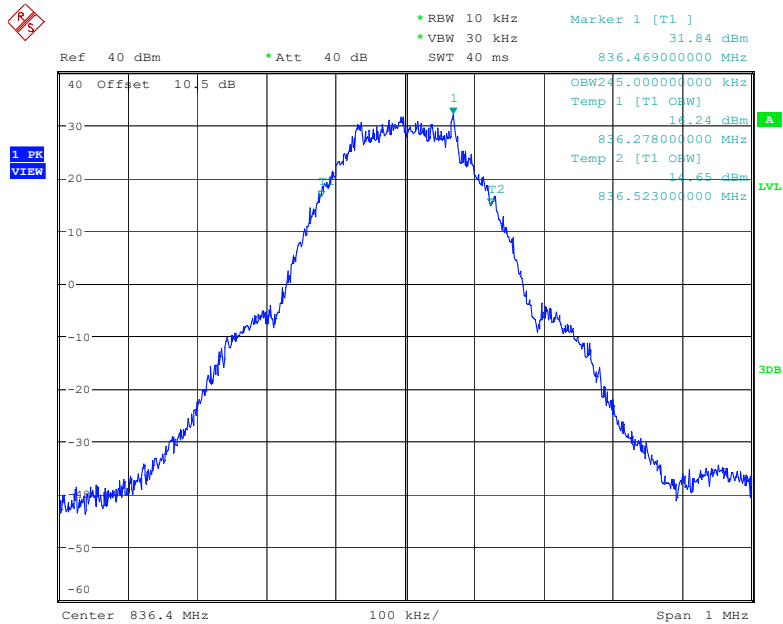
Date: 2.JUL.2022 10:39:04

99% Occupied Bandwidth for GSM (GMSK) Mode, Low channel



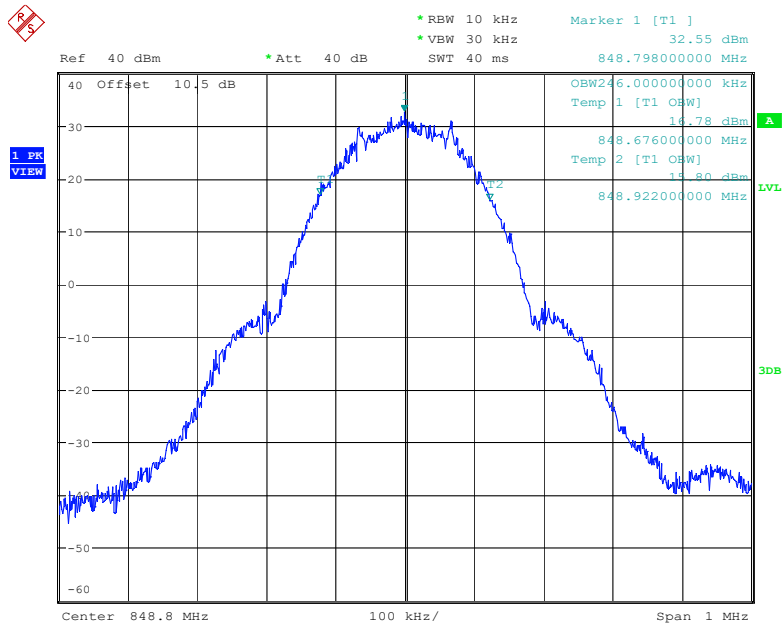
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99% Occupied Bandwidth for GSM (GMSK) Mode, Middle channel



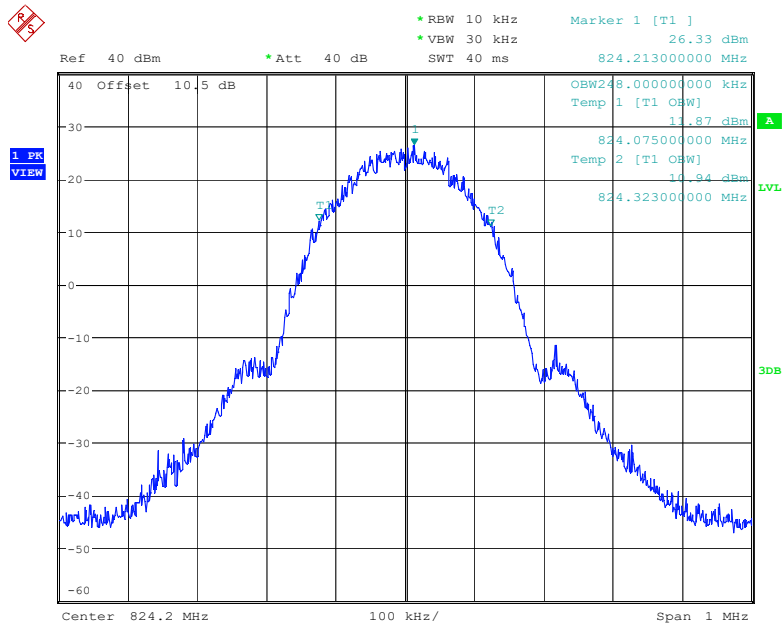
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99% Occupied Bandwidth for GSM (GMSK) Mode, High channel



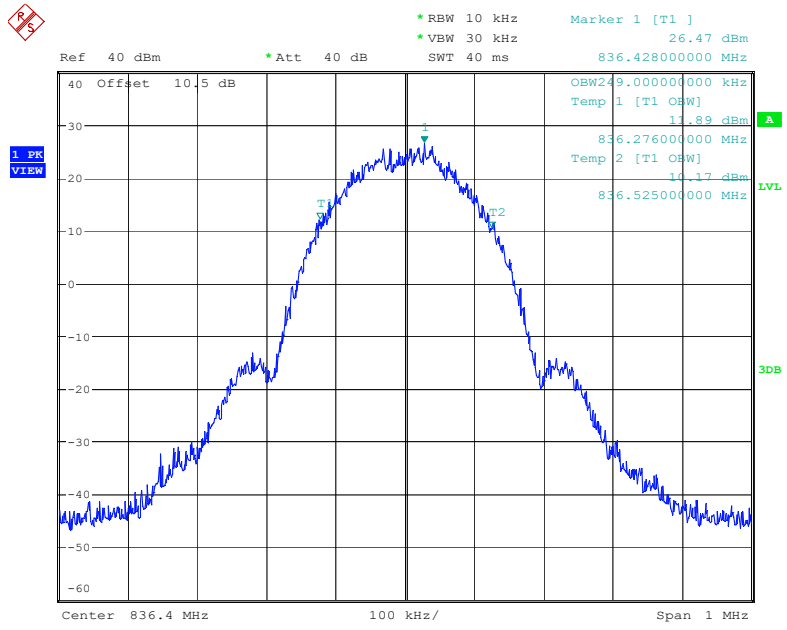
Date: 1.JUL.2022 16:37:43

99% Occupied Bandwidth for EGPRS (8PSK) Mode, Low channel



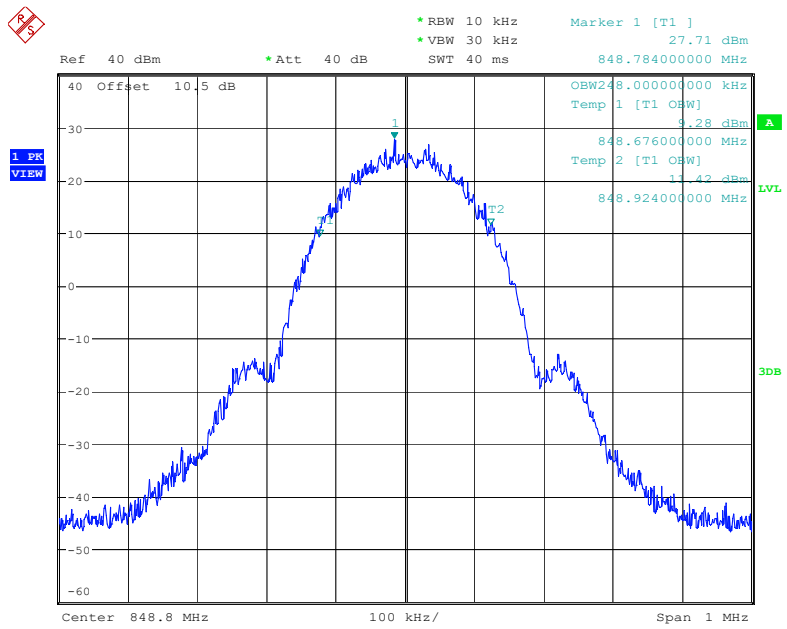
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99% Occupied Bandwidth for EGPRS (8PSK) Mode, Middle channel



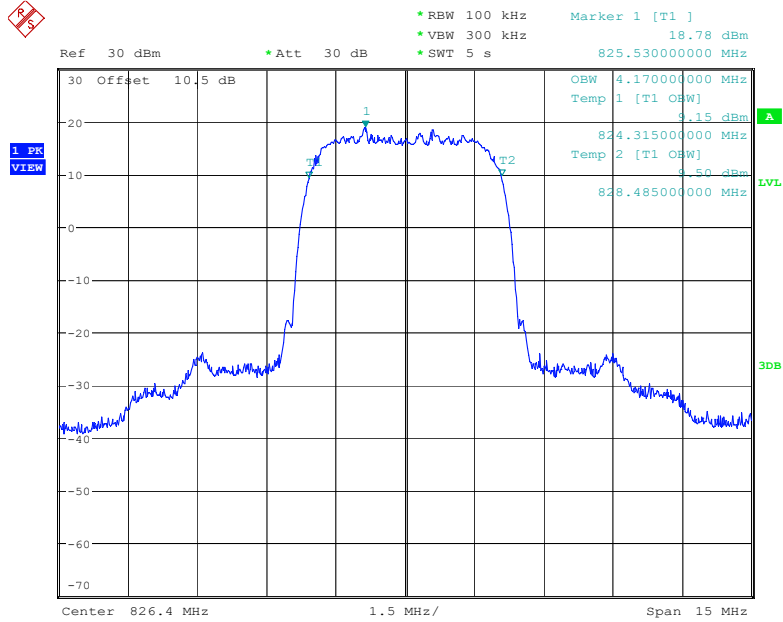
Date: 1.JUL.2022 16:25:12

99% Occupied Bandwidth for EGPRS (8PSK) Mode, High channel



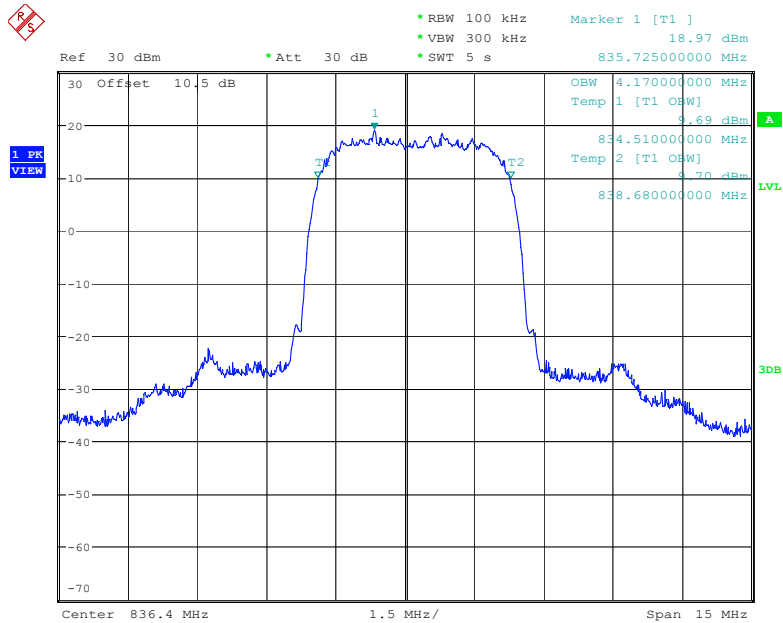
Date: 1.JUL.2022 16:27:27

99% Occupied Bandwidth for RMC (BPSK) Mode, Low channel



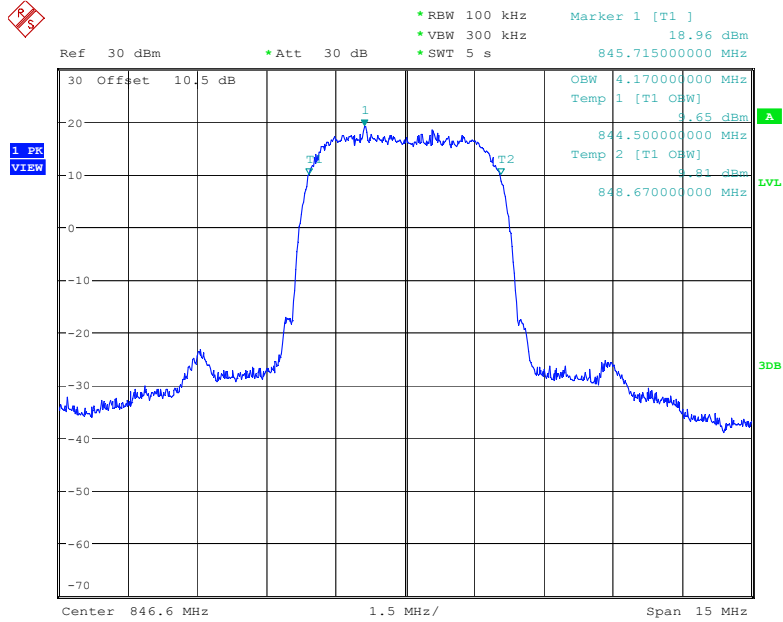
Date: 2.JUL.2022 09:59:23

99% Occupied Bandwidth for RMC (BPSK) Mode, Middle channel



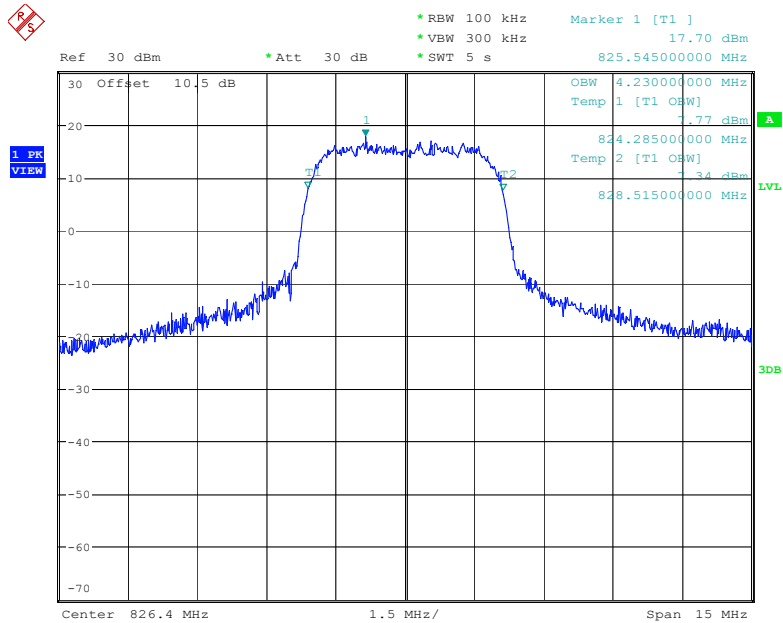
Date: 2.JUL.2022 10:02:34

99% Occupied Bandwidth for RMC (BPSK) Mode, High channel



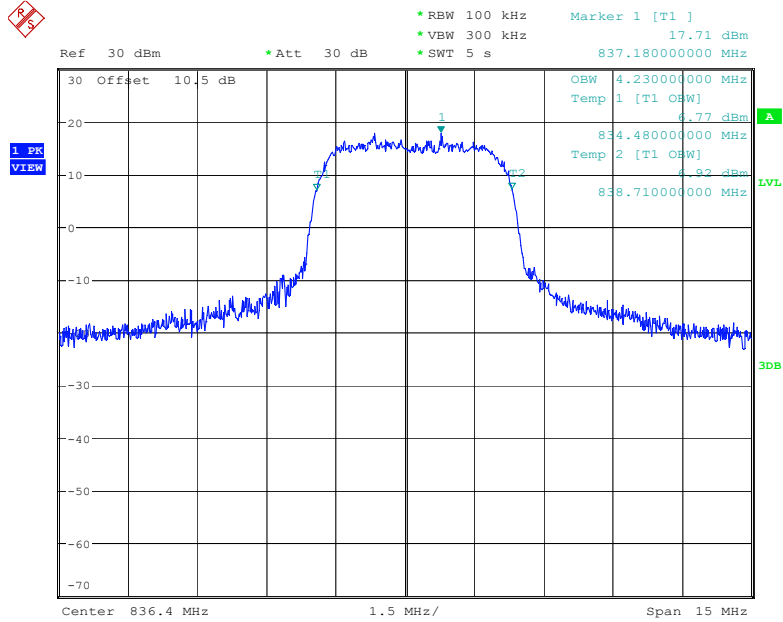
Date: 2.JUL.2022 10:05:01

99% Occupied Bandwidth for HSUPA (QPSK) Mode, Low channel



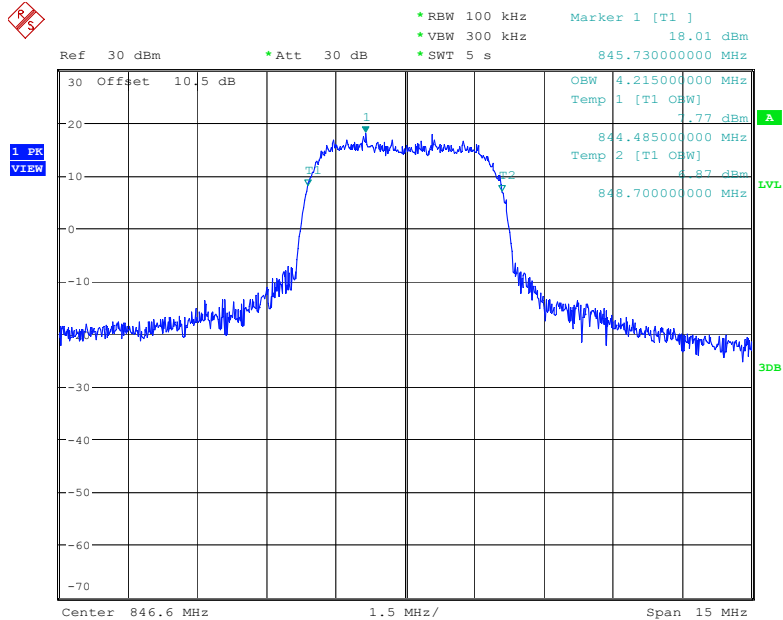
Date: 2.JUL.2022 10:11:26

99% Occupied Bandwidth for HSUPA (QPSK) Mode, Middle channel



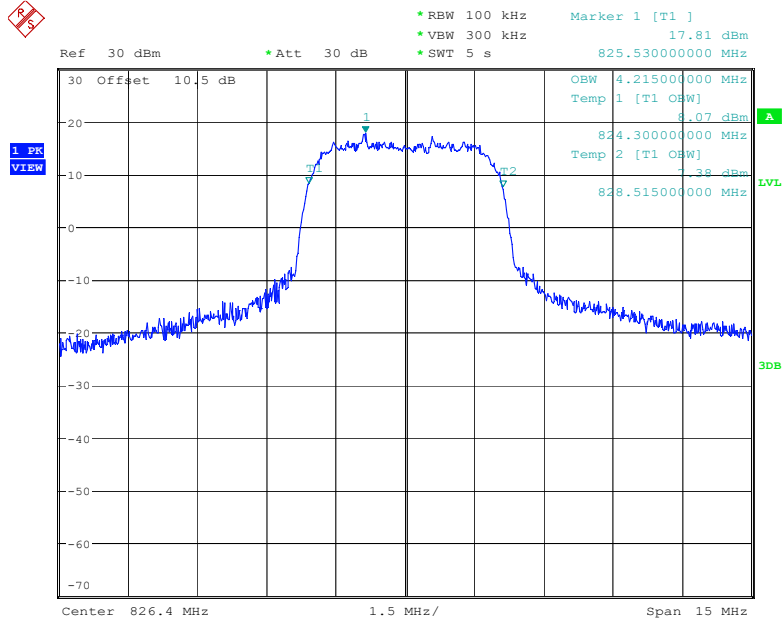
Date: 2.JUL.2022 10:15:19

99% Occupied Bandwidth for HSUPA (QPSK) Mode, High channel



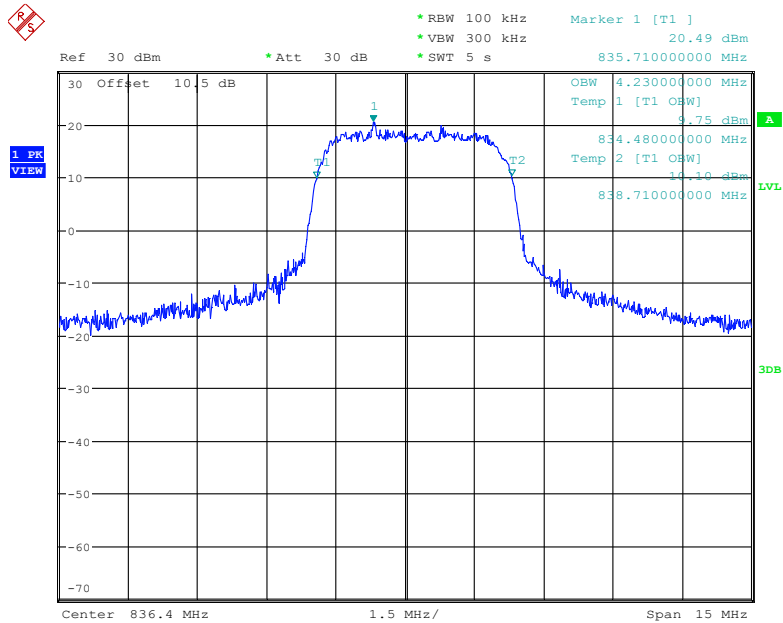
Date: 2.JUL.2022 10:17:47

99% Occupied Bandwidth for HSDPA (16QAM) Mode, Low channel



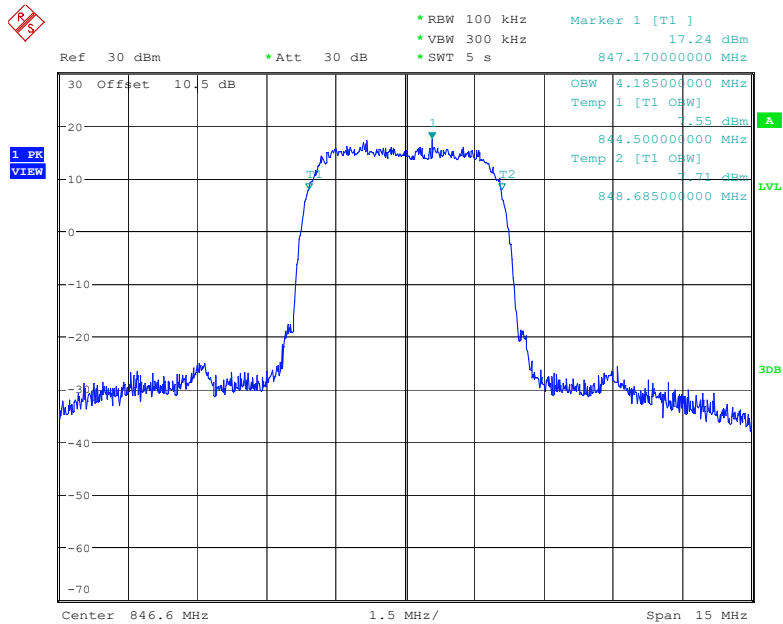
Date: 2.JUL.2022 10:24:32

99% Occupied Bandwidth for HSDPA (16QAM) Mode, Middle channel



Date: 2.JUL.2022 18:38:15

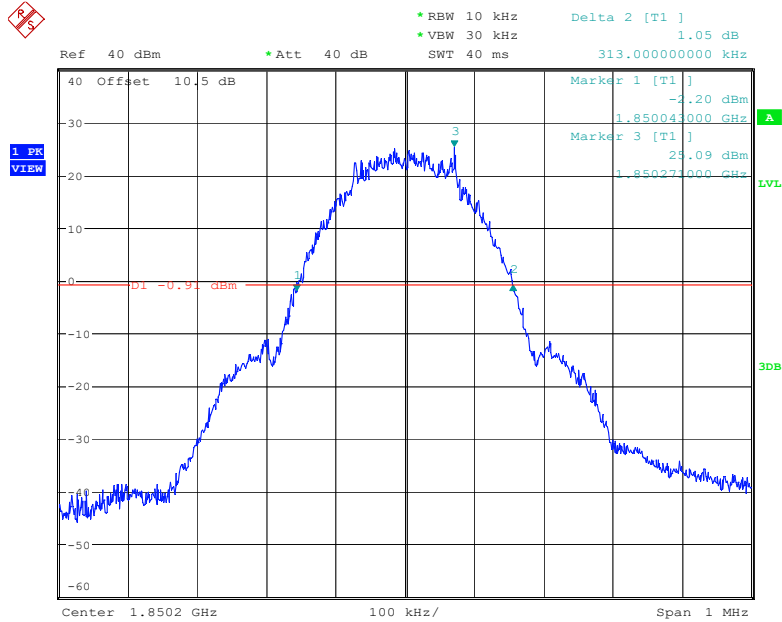
99% Occupied Bandwidth for HSDPA (16QAM) Mode, High channel



Date: 2.JUL.2022 10:38:27

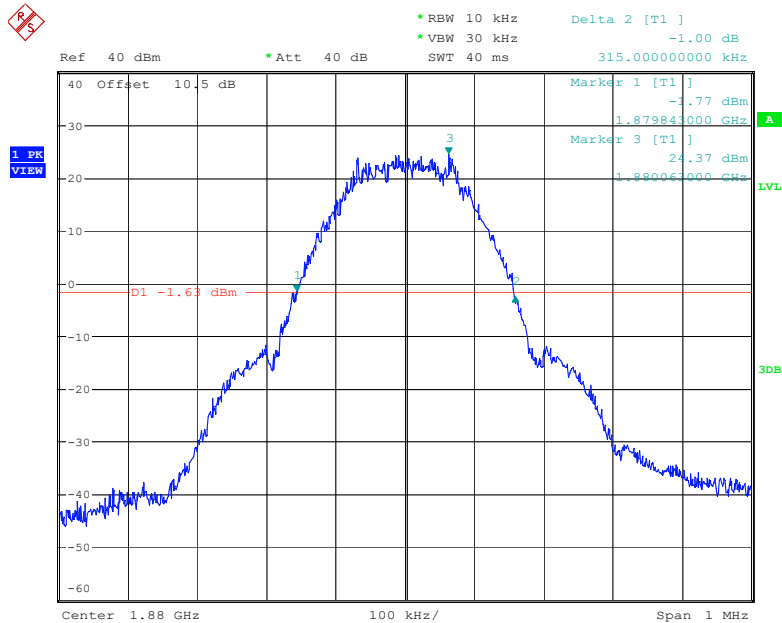
PCS Band (Part 24E)

26 dB Emissions for GSM (GMSK) Mode, Low channel



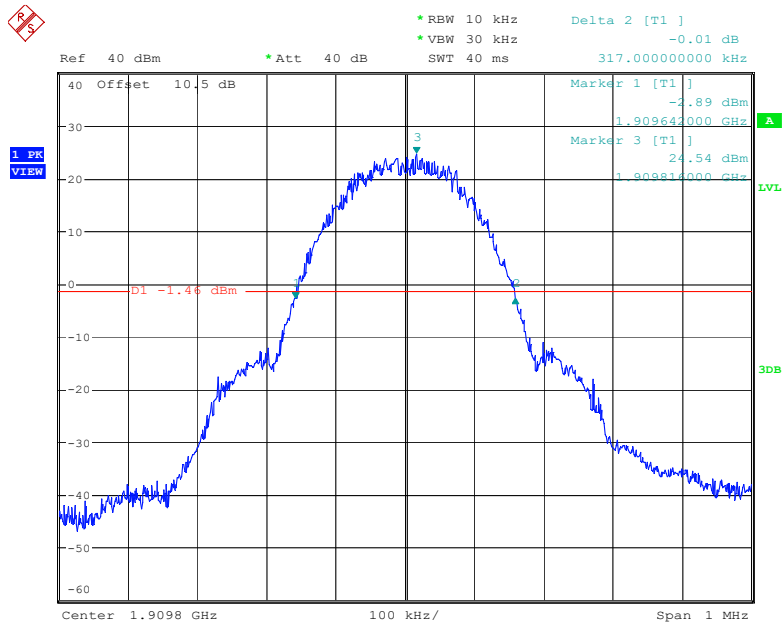
Date: 1.JUL.2022 16:53:43

26 dB Emissions for GSM (GMSK) Mode, Middle channel



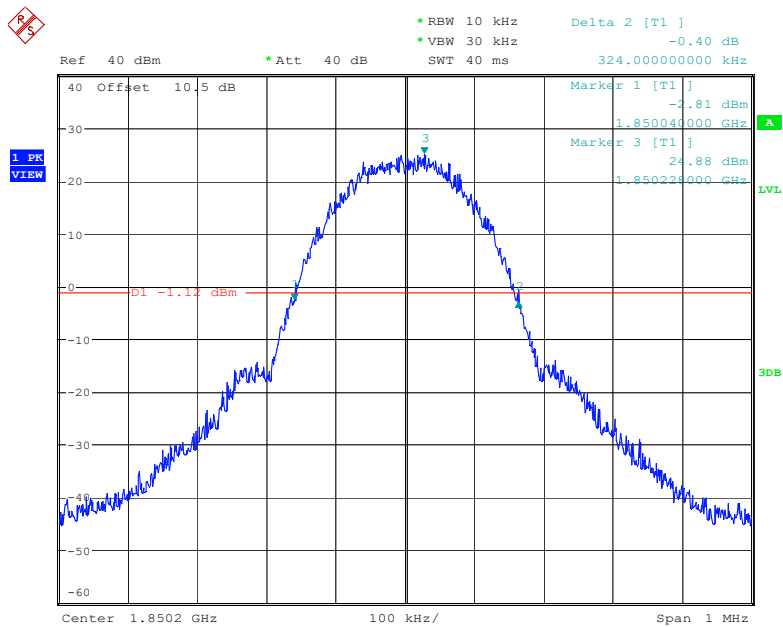
Date: 1.JUL.2022 16:58:03

26 dB Emissions for GSM (GMSK) Mode, High channel



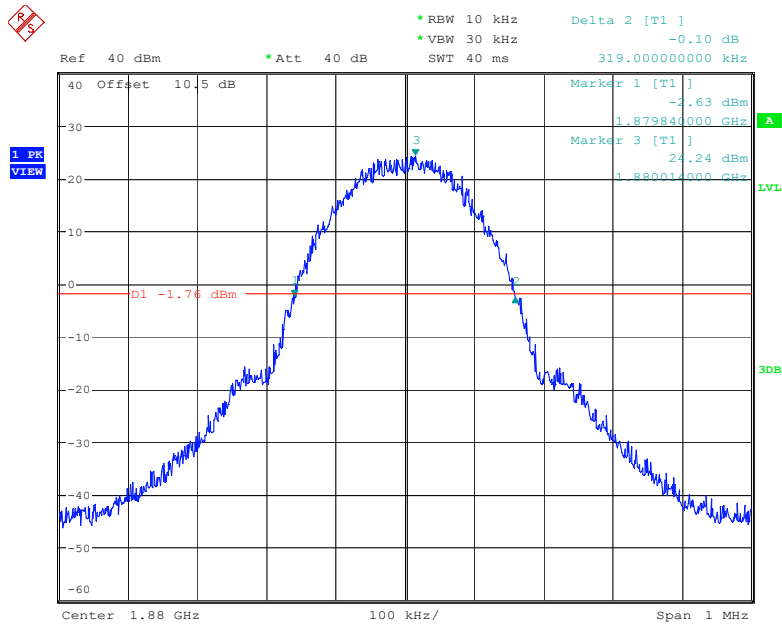
Date: 1.JUL.2022 17:01:21

26 dB Emissions for EGPRS (8PSK) Mode, Low channel



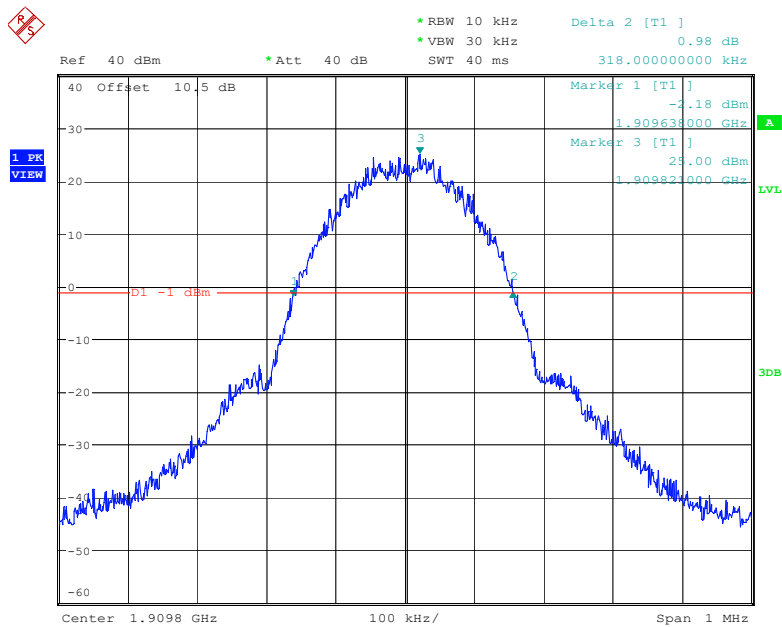
Date: 1.JUL.2022 16:42:18

26 dB Emissions for EGPRS (8PSK) Mode, Middle channel



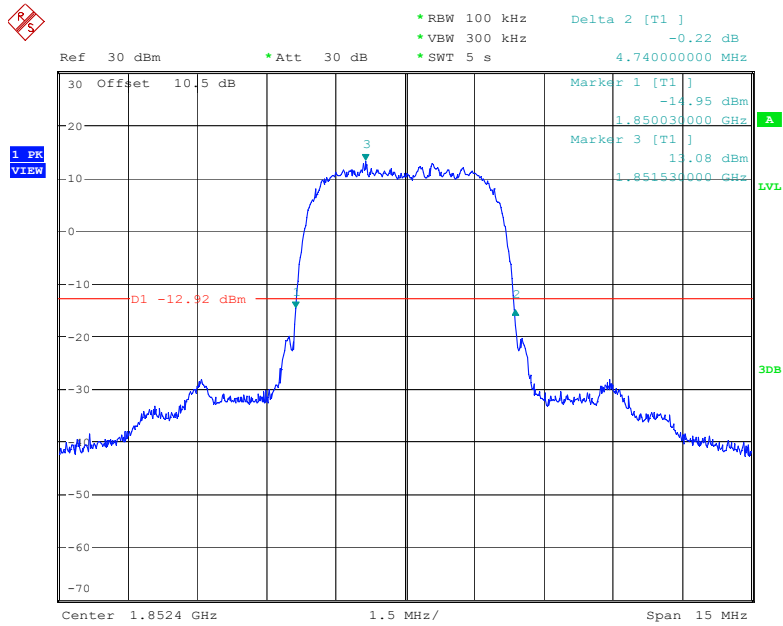
Date: 1.JUL.2022 16:45:46

26 dB Emissions for EGPRS (8PSK) Mode, High channel



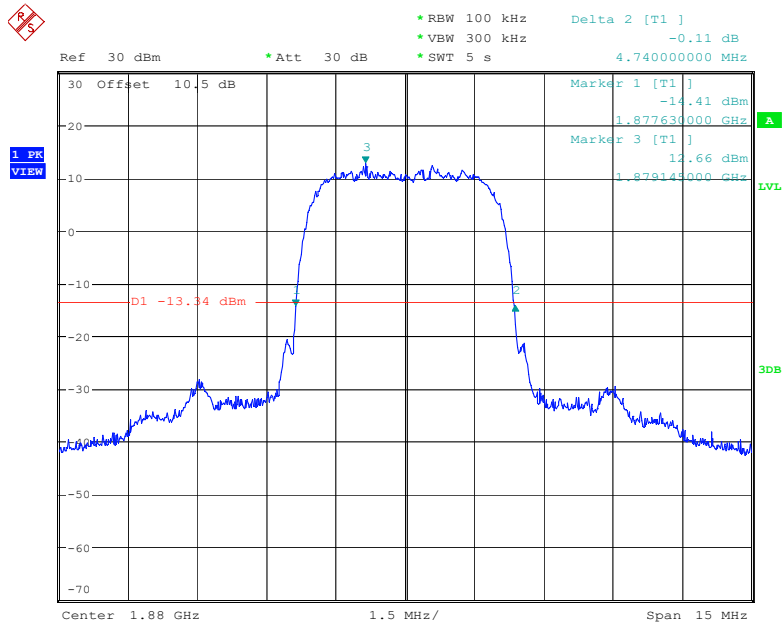
Date: 1.JUL.2022 16:48:37

26 dB Emissions for RMC (BPSK) Mode, Low channel



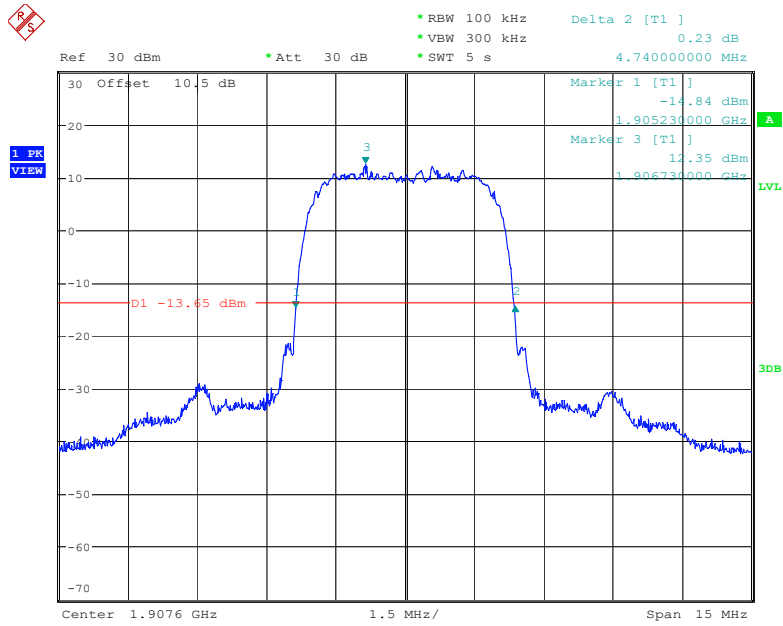
Date: 1.JUL.2022 17:07:46

26 dB Emissions for RMC (BPSK) Mode, Middle channel



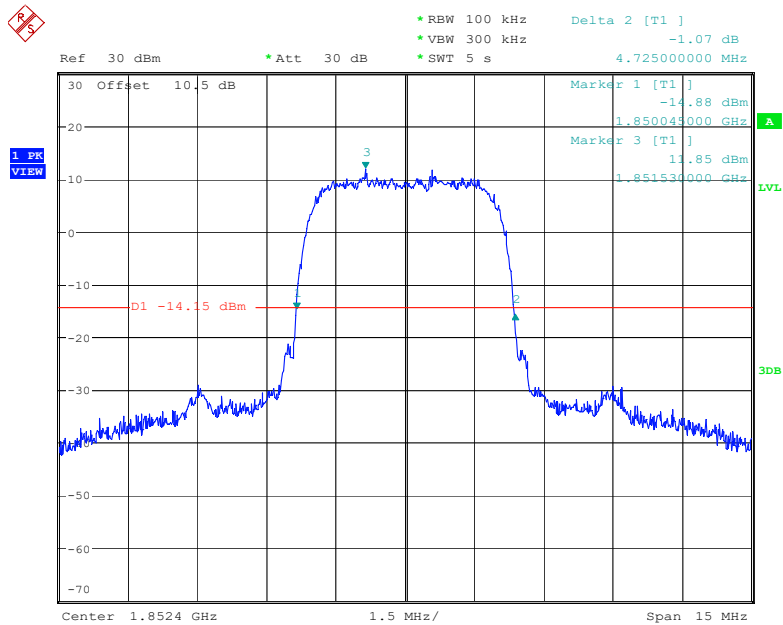
Date: 1.JUL.2022 17:11:32

26 dB Emissions for RMC (BPSK) Mode, High channel



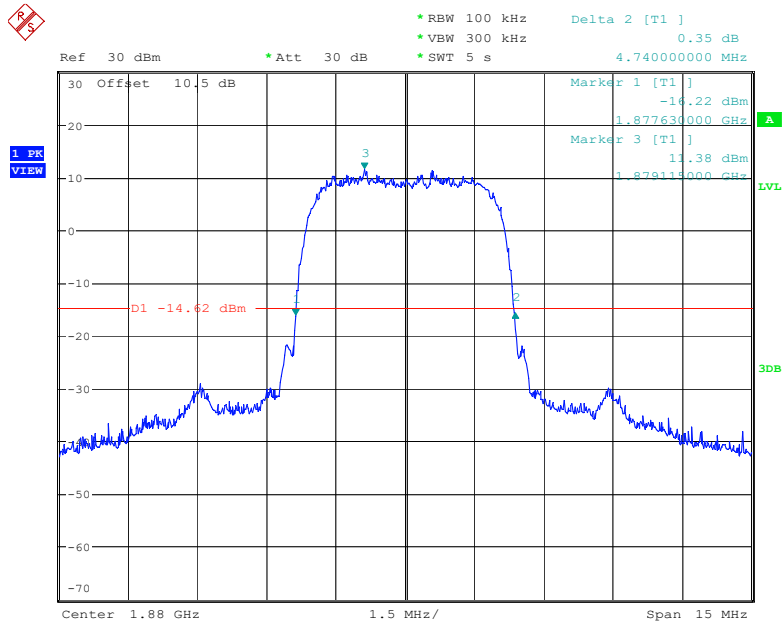
Date: 1.JUL.2022 17:37:36

26 dB Emissions for HSUPA (QPSK) Mode, Low channel



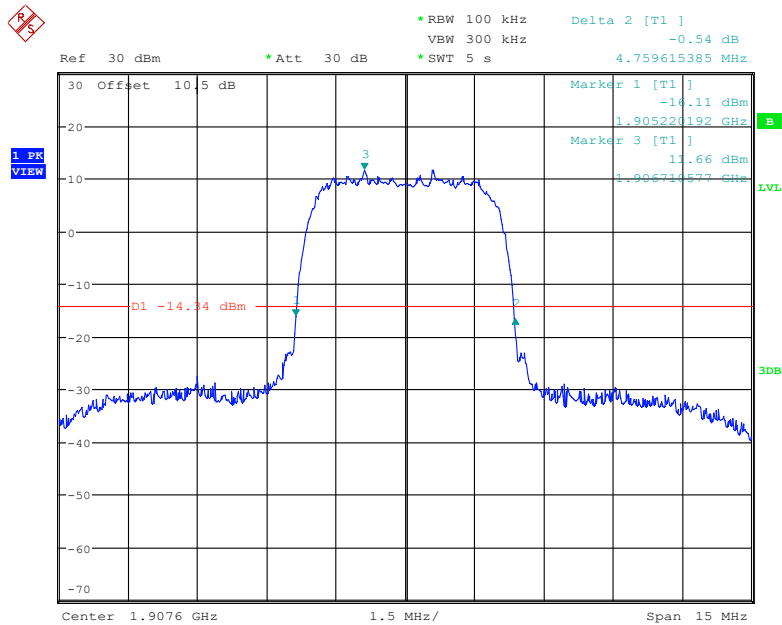
Date: 1.JUL.2022 18:22:14

26 dB Emissions for HSUPA (QPSK) Mode, Middle channel



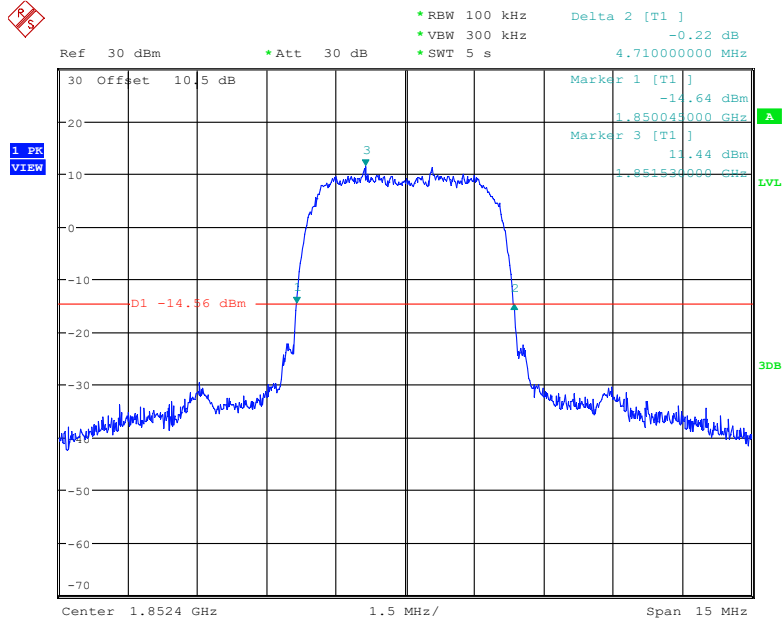
Date: 1.JUL.2022 18:26:25

26 dB Emissions for HSUPA (QPSK) Mode, High channel



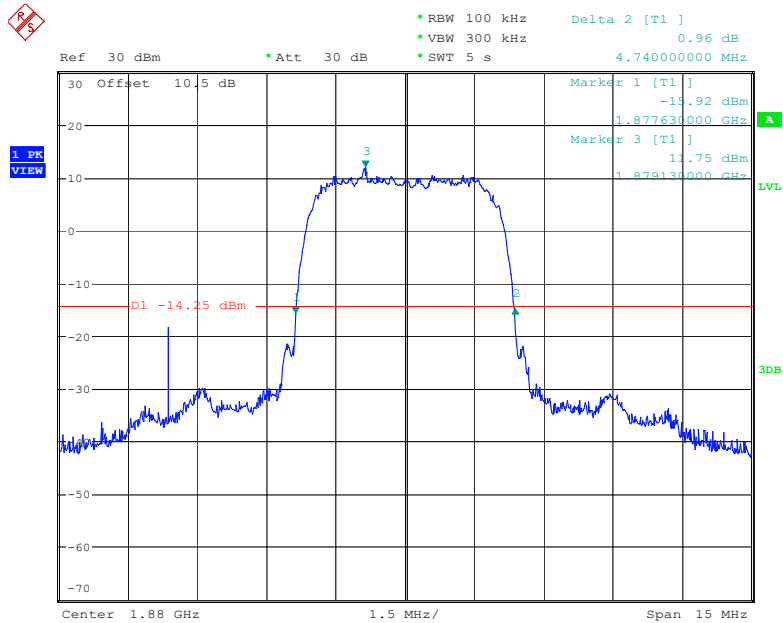
Date: 15.JUL.2022 13:04:42

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



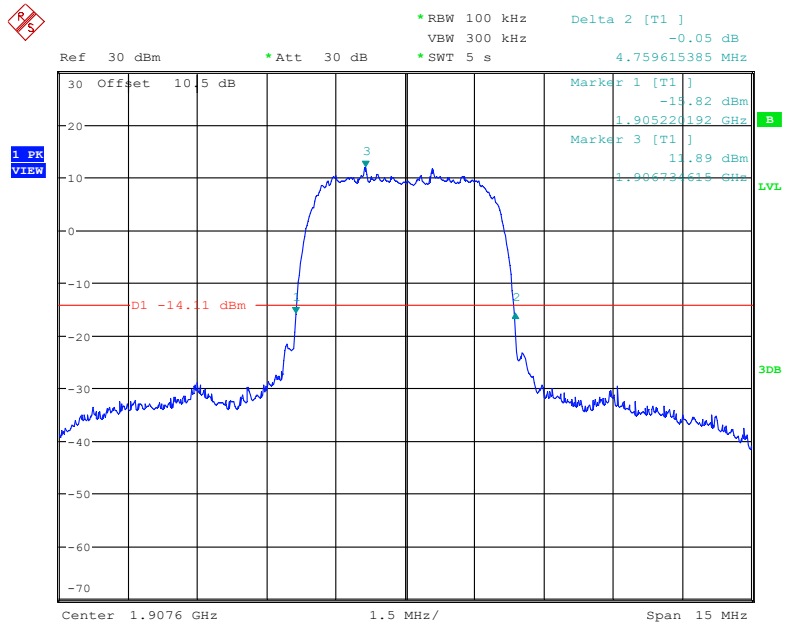
Date: 2.JUL.2022 18:35:22

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



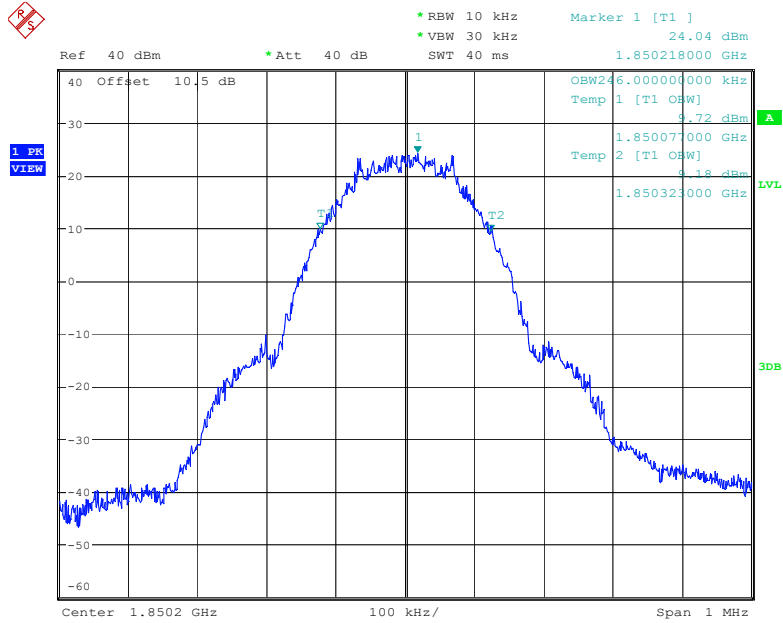
Date: 1.JUL.2022 18:12:35

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



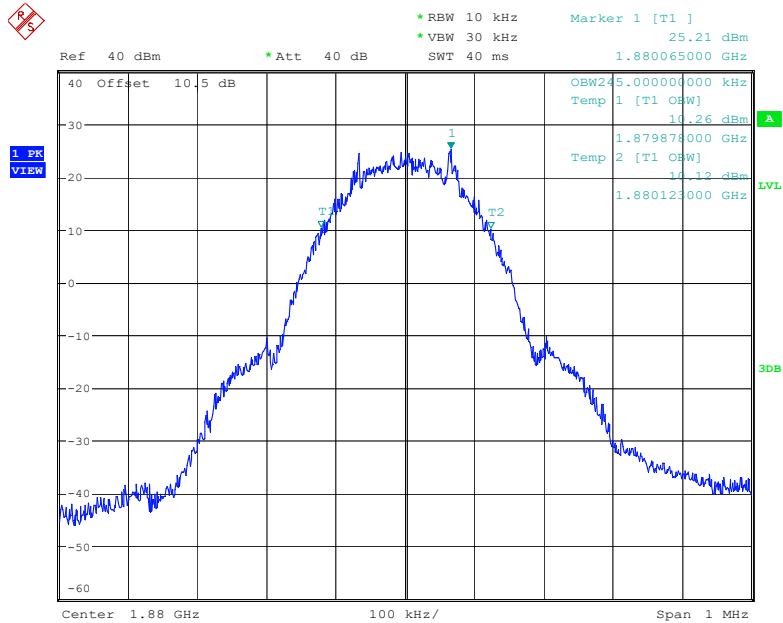
Date: 15.JUL.2022 13:10:19

99% Occupied Bandwidth for GSM (GMSK) Mode, Low channel



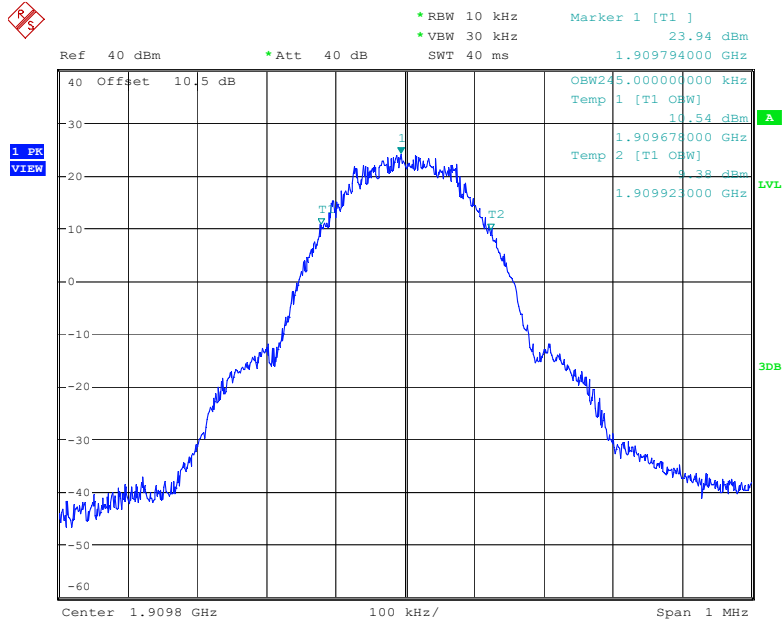
Date: 1.JUL.2022 16:53:15

99% Occupied Bandwidth for GSM (GMSK) Mode, Middle channel



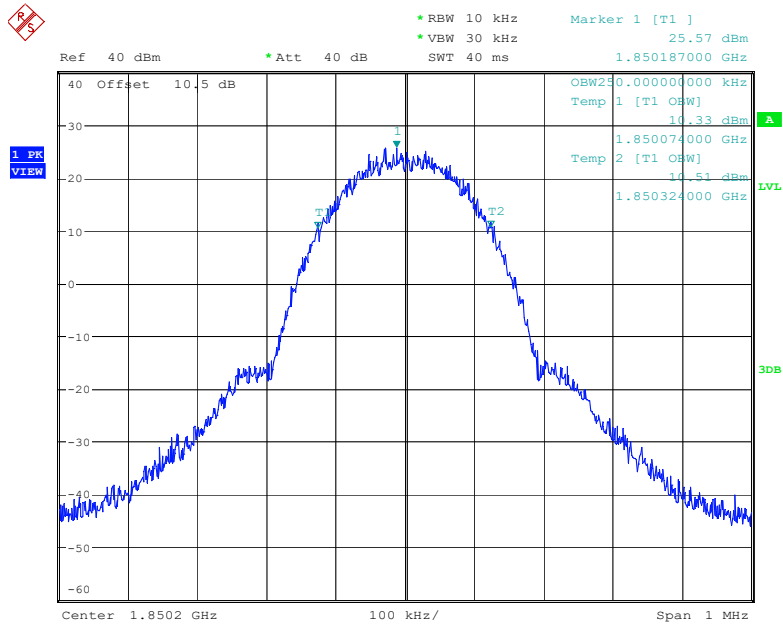
Date: 1.JUL.2022 16:57:36

99% Occupied Bandwidth for GSM (GMSK) Mode, High channel



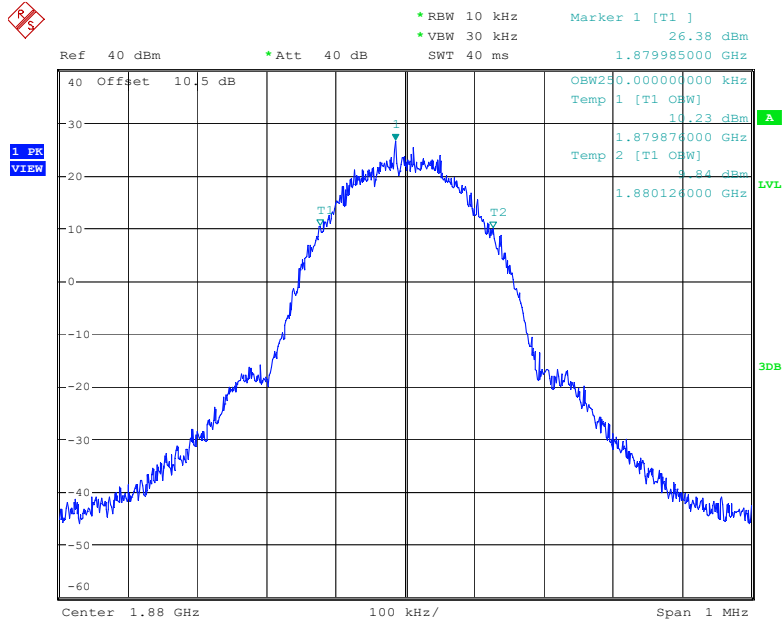
Date: 1.JUL.2022 17:00:54

99% Occupied Bandwidth for EGPRS (8PSK) Mode, Low channel



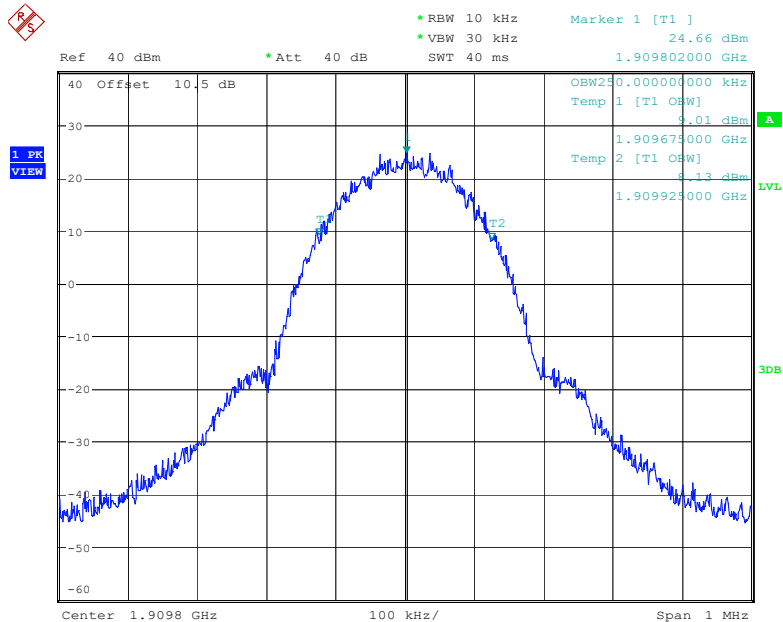
Date: 1.JUL.2022 16:41:51

99% Occupied Bandwidth for EGPRS (8PSK) Mode, Middle channel



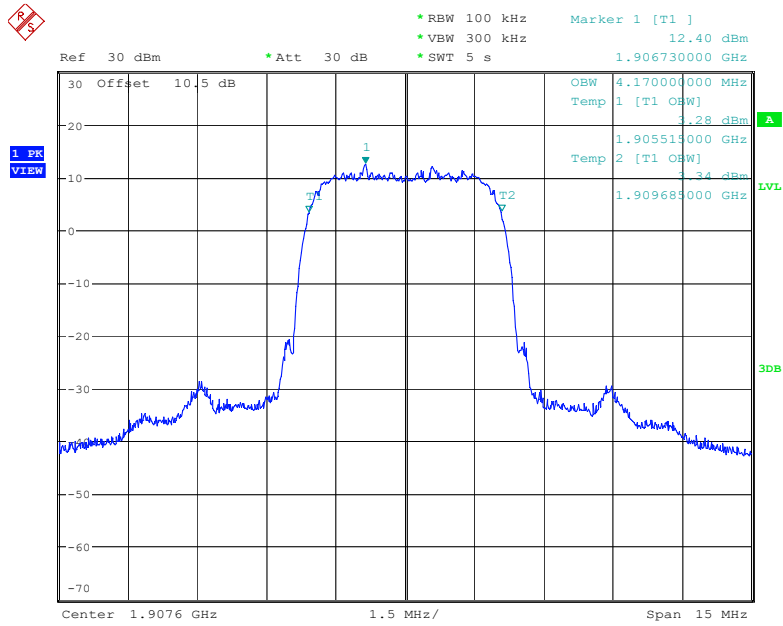
Date: 1.JUL.2022 16:45:18

99% Occupied Bandwidth for EGPRS (8PSK) Mode, High channel



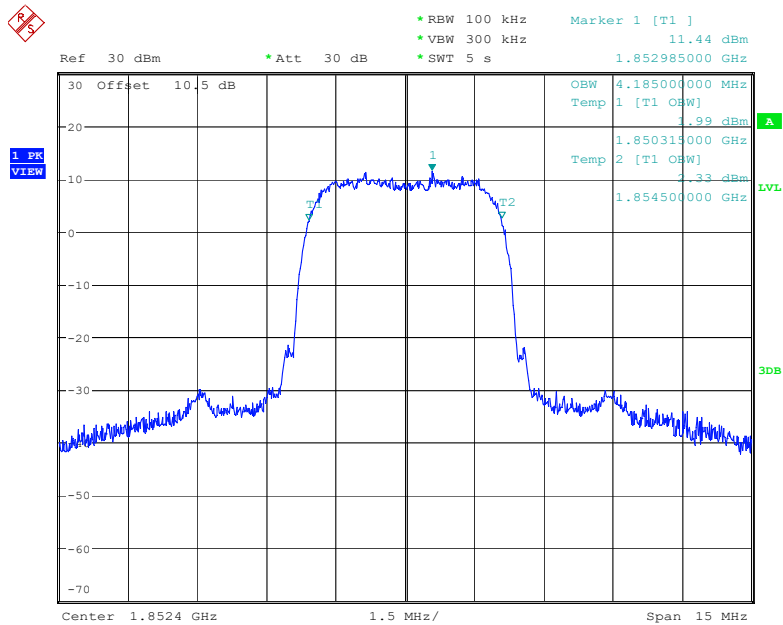
Date: 1.JUL.2022 16:48:10

99% Occupied Bandwidth for RMC (BPSK) Mode, High channel



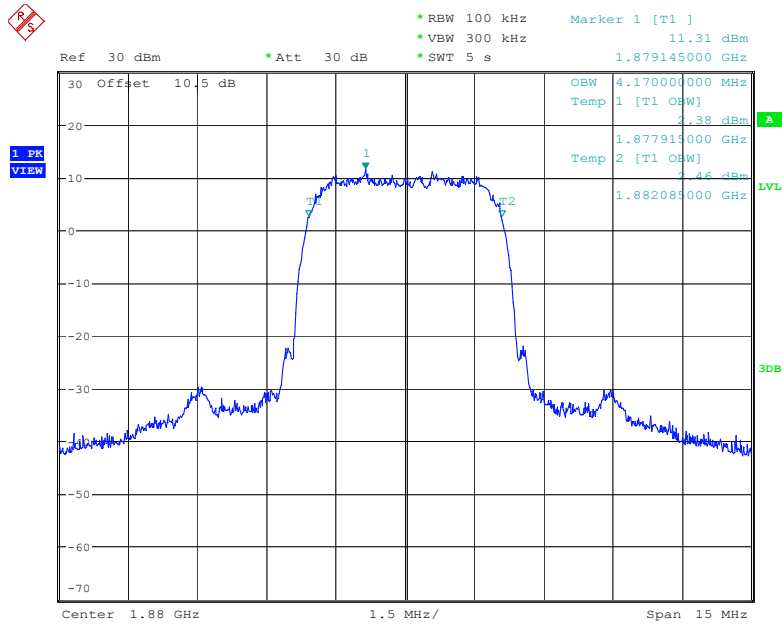
Date: 1.JUL.2022 17:36:58

99% Occupied Bandwidth for HSUPA (QPSK) Mode, Low channel



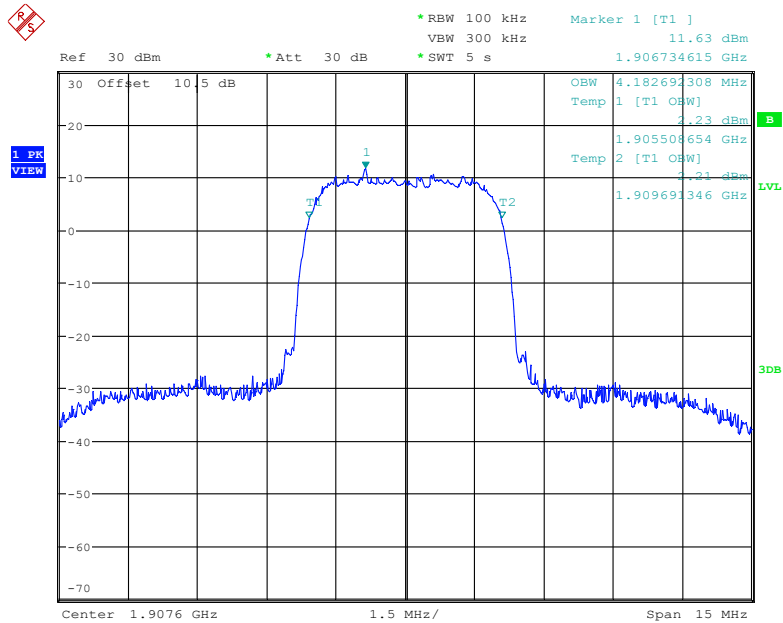
Date: 1.JUL.2022 18:21:36

99% Occupied Bandwidth for HSUPA (QPSK) Mode, Middle channel



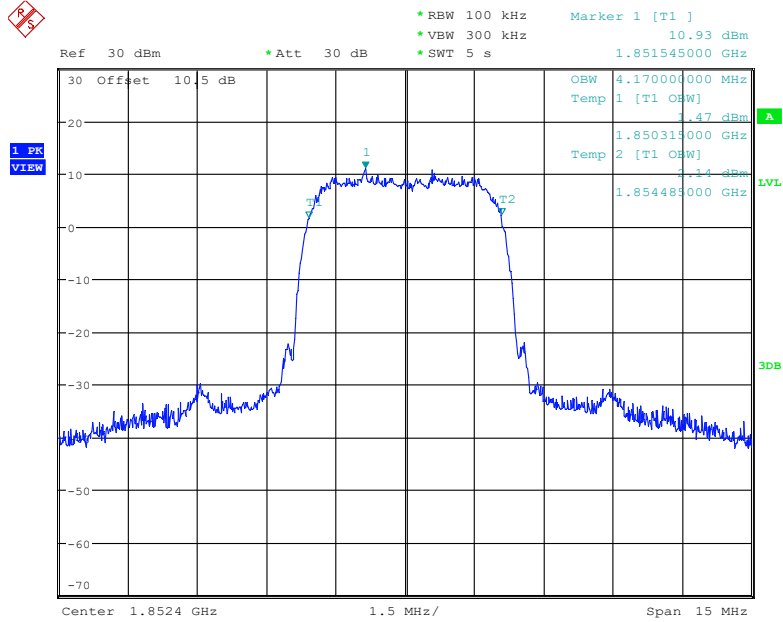
Date: 1.JUL.2022 18:25:48

99% Occupied Bandwidth for HSUPA (QPSK) Mode, High channel



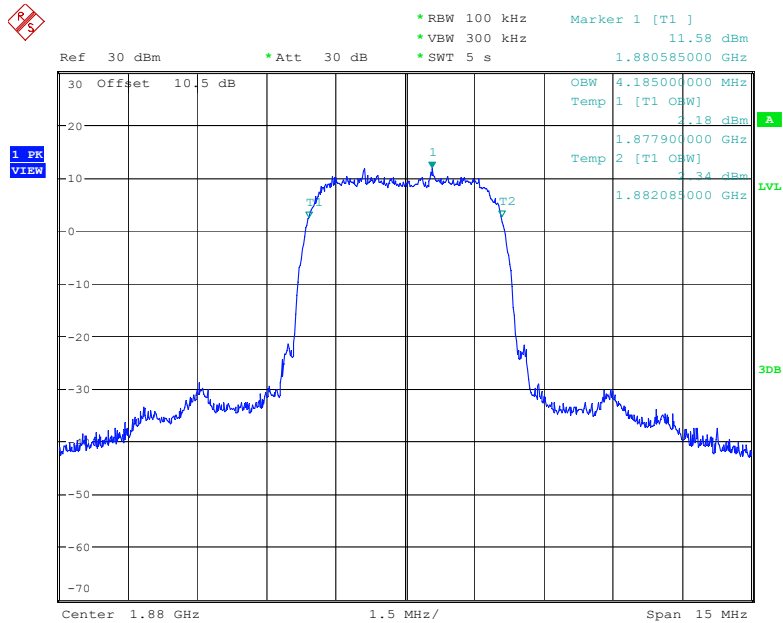
Date: 15.JUL.2022 13:14:27

99% Occupied Bandwidth for HSDPA (16QAM) Mode, Low channel



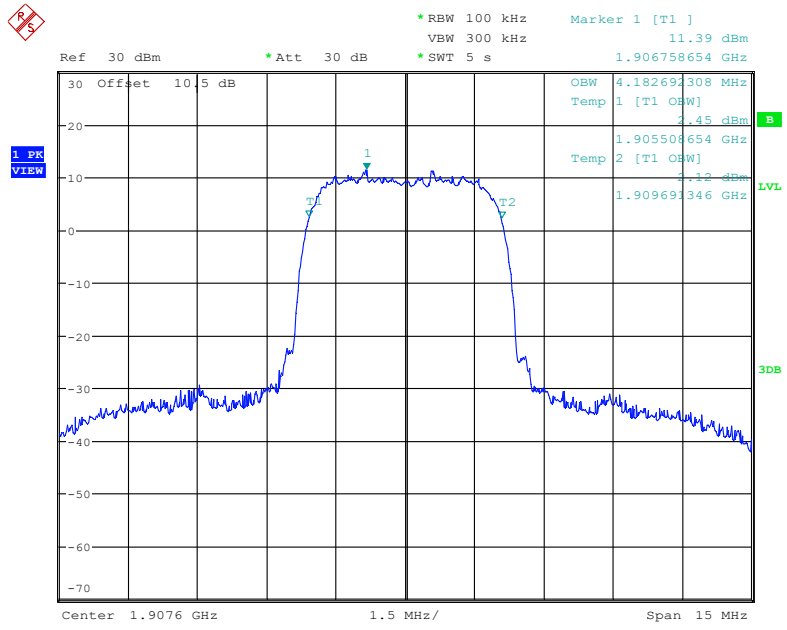
Date: 2.JUL.2022 18:34:44

99% Occupied Bandwidth for HSDPA (16QAM) Mode, Middle channel



Date: 1.JUL.2022 18:11:57

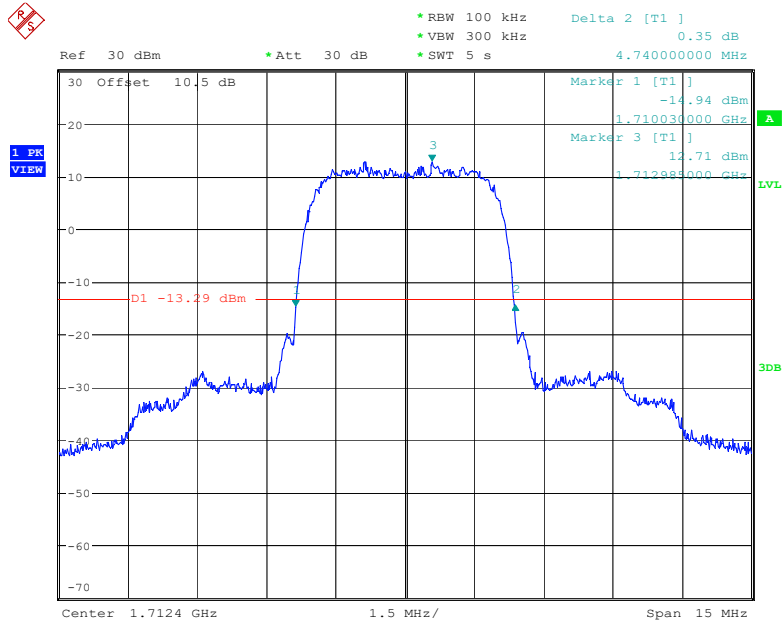
99% Occupied Bandwidth for HSDPA (16QAM) Mode, High channel



Date: 15.JUL.2022 13:12:15

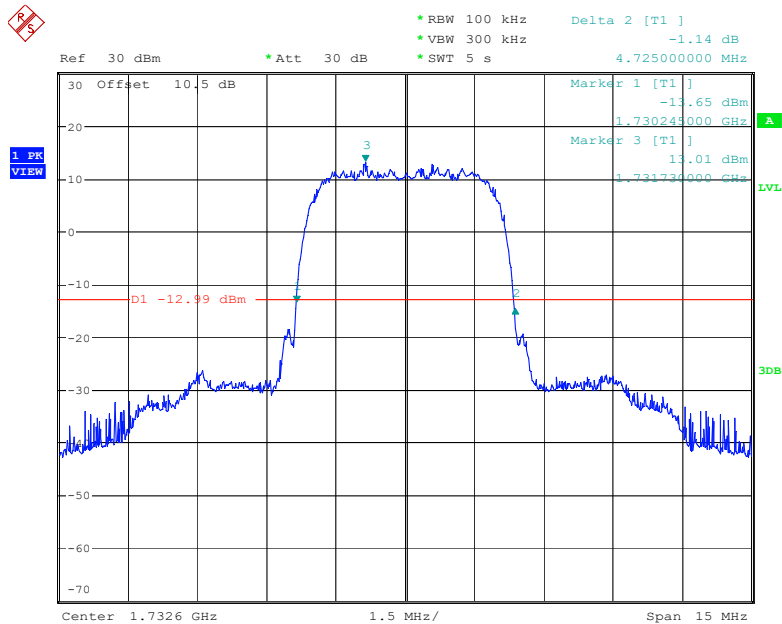
AWS Band (Part 27)

26 dB Emissions for RMC (BPSK) Mode, Low channel



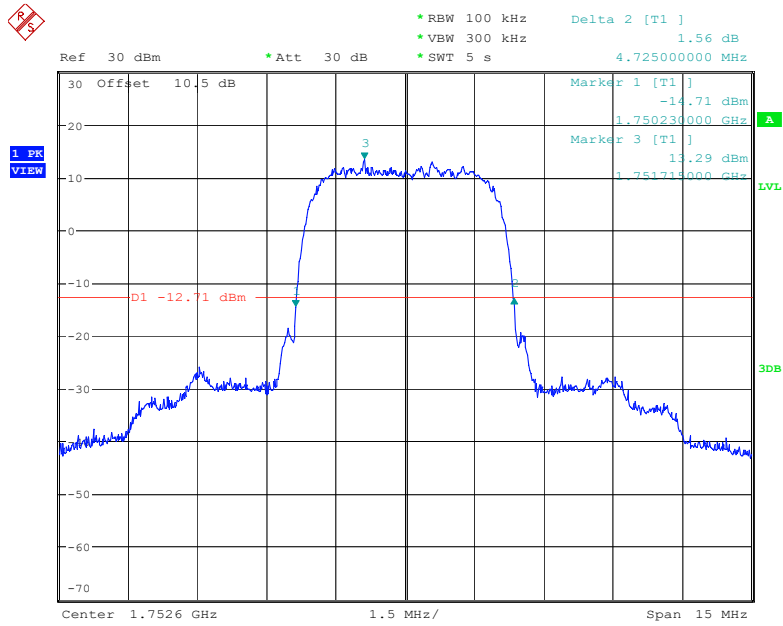
Date: 1.JUL.2022 18:37:30

26 dB Emissions for RMC (BPSK) Mode, Middle channel



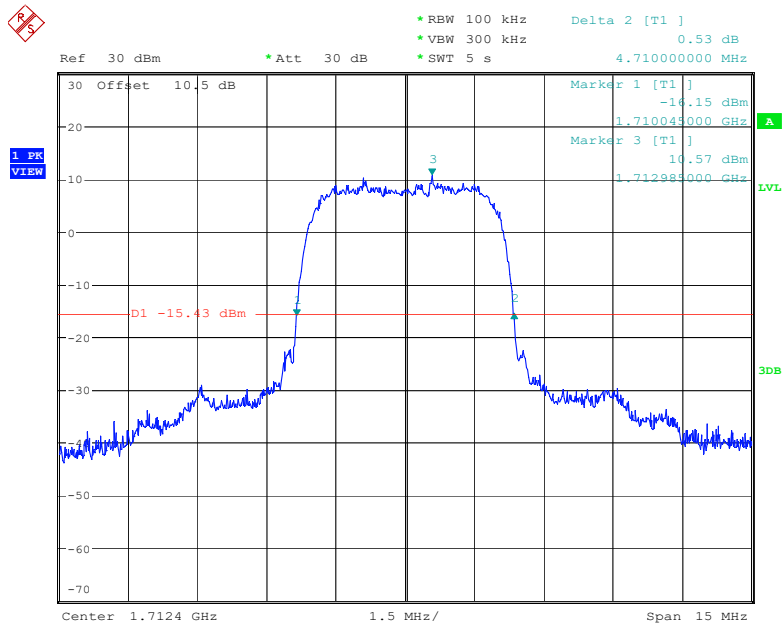
Date: 1.JUL.2022 18:41:18

26 dB Emissions for RMC (BPSK) Mode, High channel



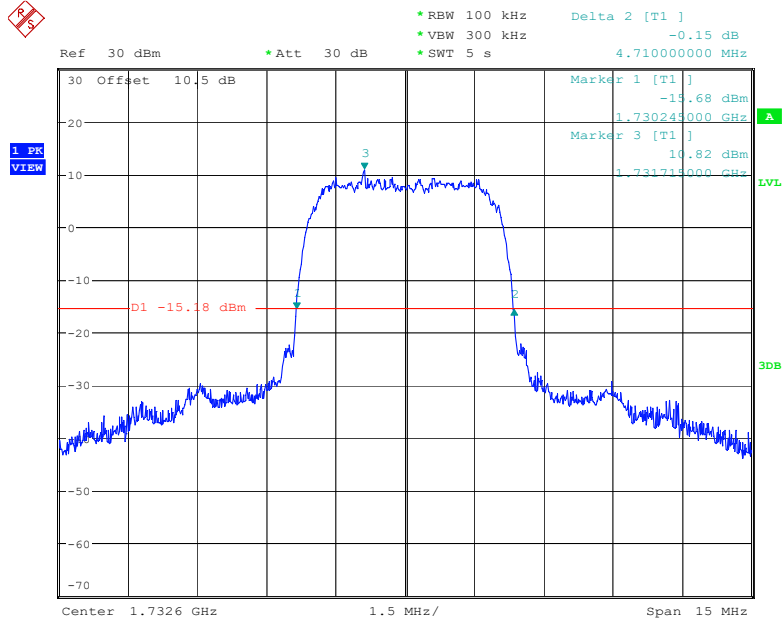
Date: 1.JUL.2022 18:44:26

26 dB Emissions for HSUPA (QPSK) Mode, Low channel



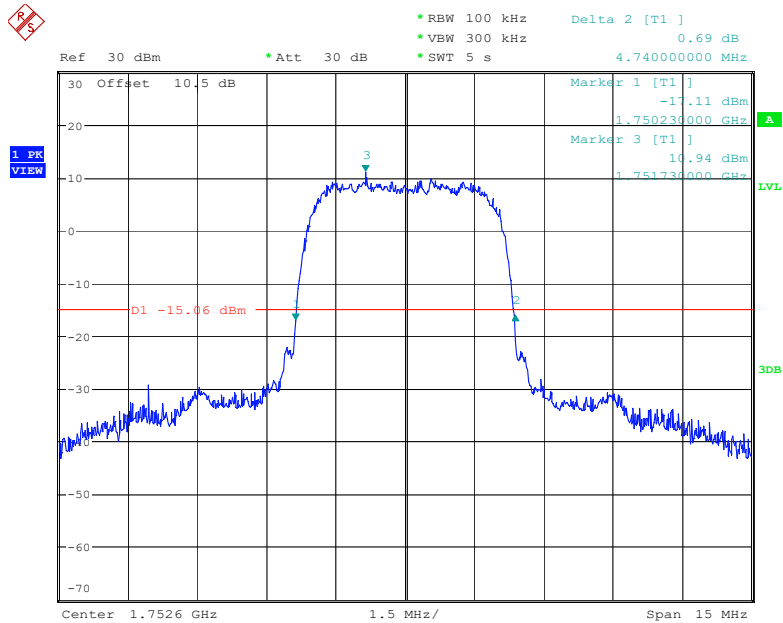
Date: 2.JUL.2022 09:47:42

26 dB Emissions & for HSUPA (QPSK) Mode, Middle channel



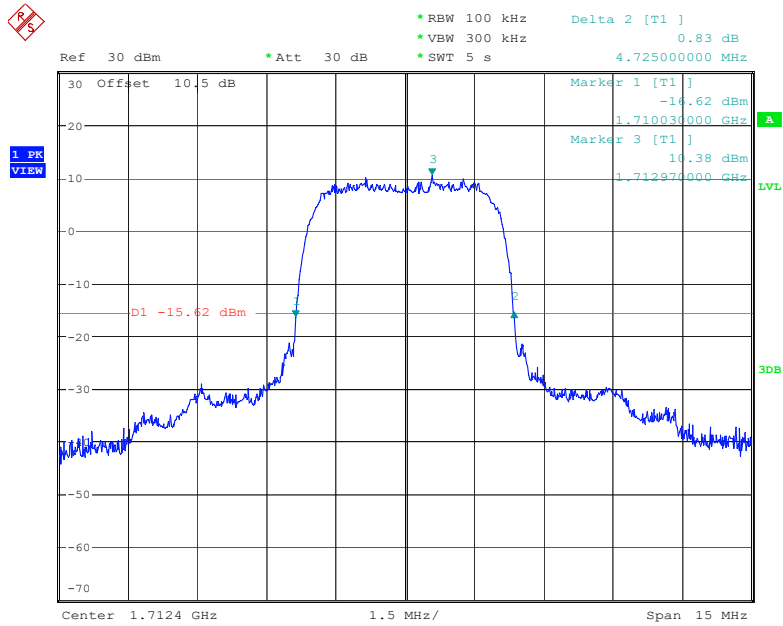
Date: 2.JUL.2022 09:51:29

26 dB Emissions for HSUPA (QPSK) Mode, High channel



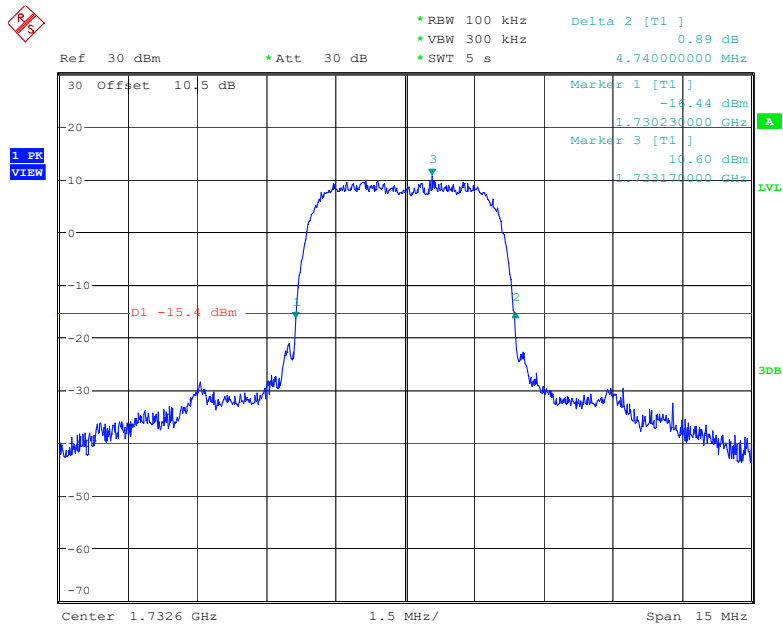
Date: 2.JUL.2022 09:54:48

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



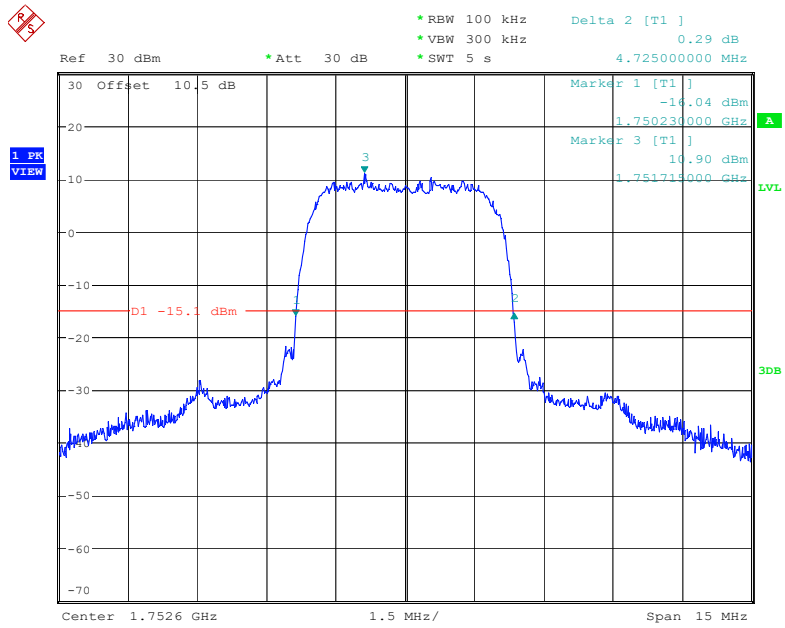
Date: 2.JUL.2022 09:35:21

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



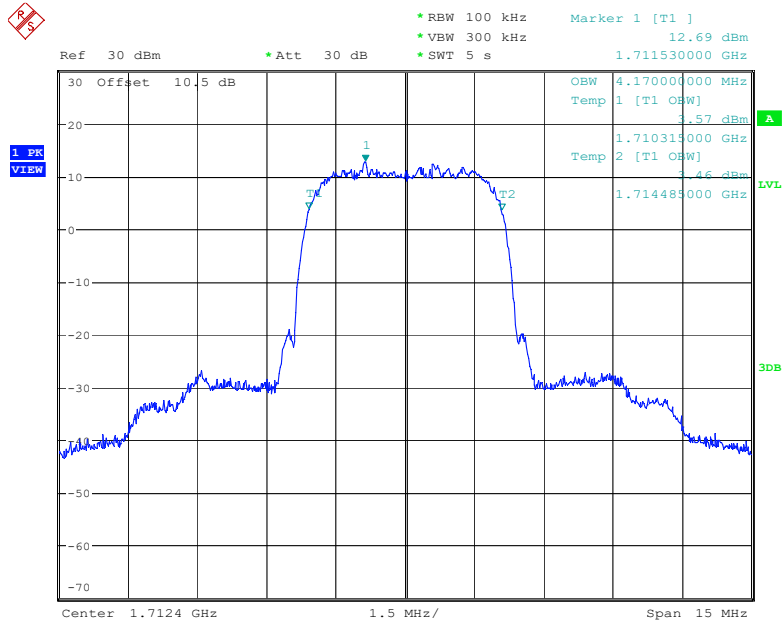
Date: 2.JUL.2022 09:39:16

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



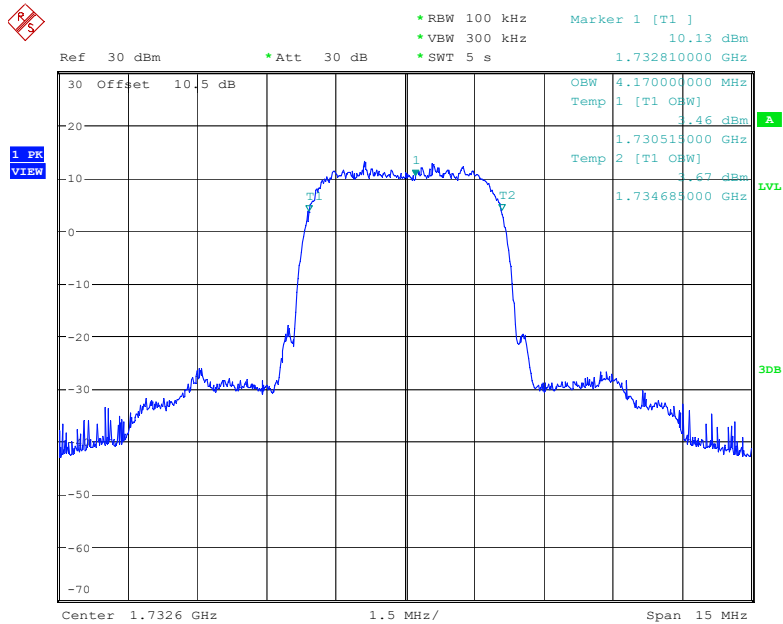
Date: 2.JUL.2022 09:42:28

99% Occupied Bandwidth for RMC (BPSK) Mode, Low channel



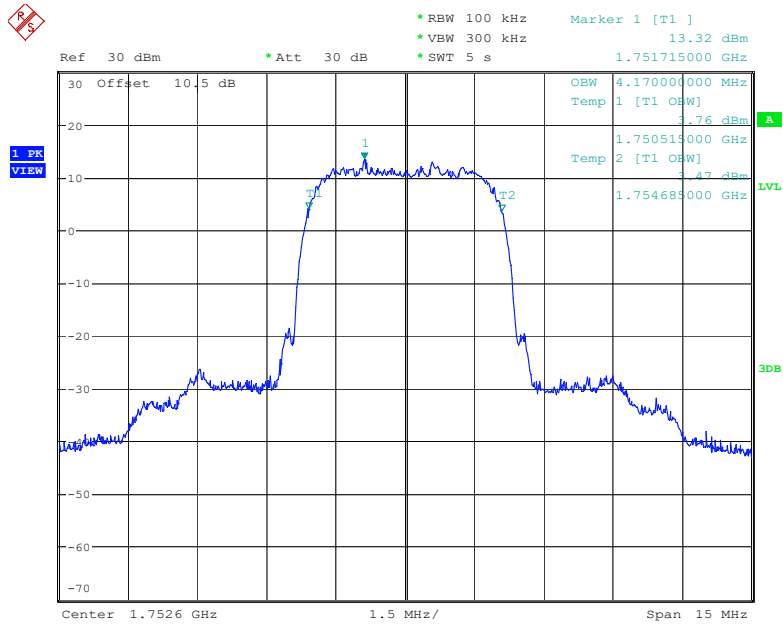
Date: 1.JUL.2022 18:36:52

99% Occupied Bandwidth for RMC (BPSK) Mode, Middle channel



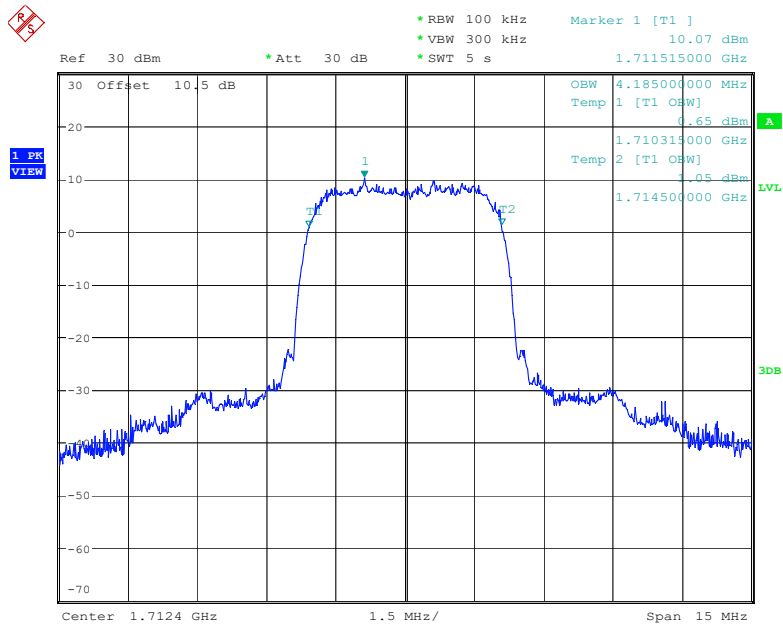
Date: 1.JUL.2022 18:40:41

99% Occupied Bandwidth for RMC (BPSK) Mode, High channel



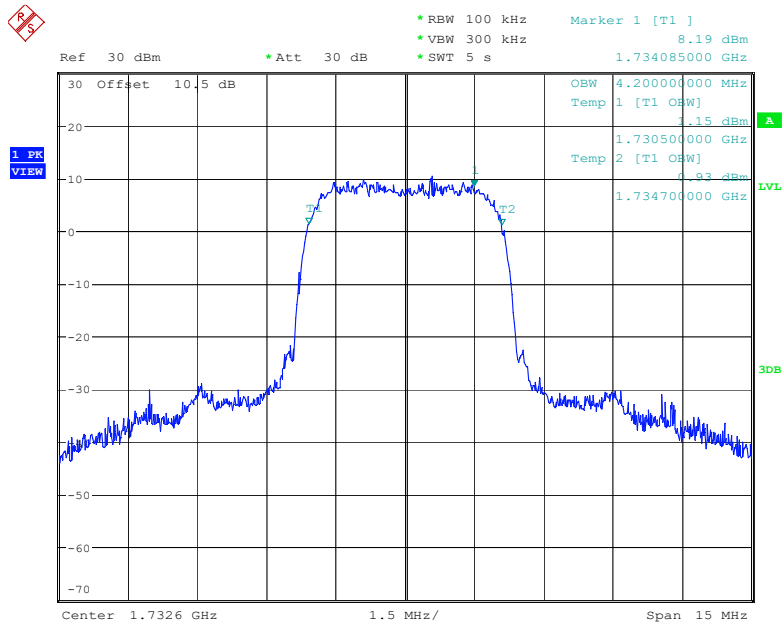
Date: 1.JUL.2022 18:43:48

99% Occupied Bandwidth for HSUPA (QPSK) Mode, Low channel



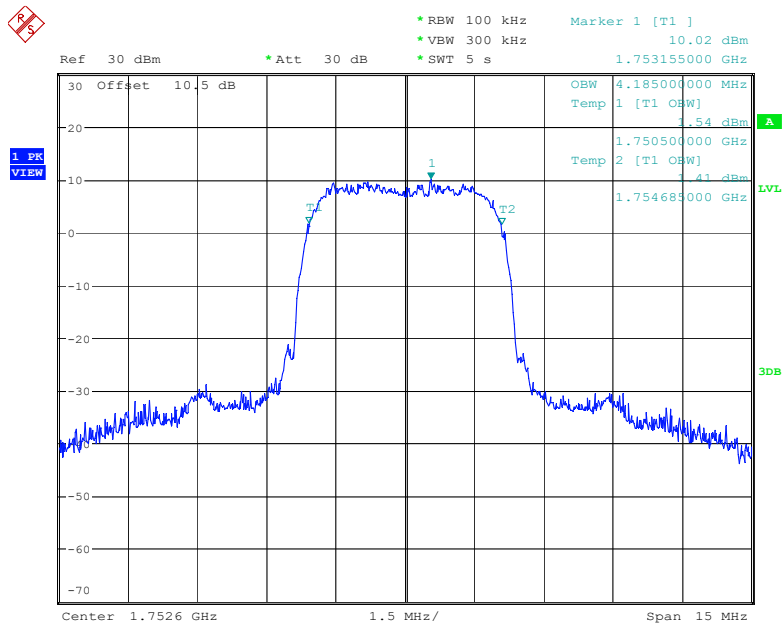
Date: 2.JUL.2022 09:47:04

99% Occupied Bandwidth for HSUPA (QPSK) Mode, Middle channel



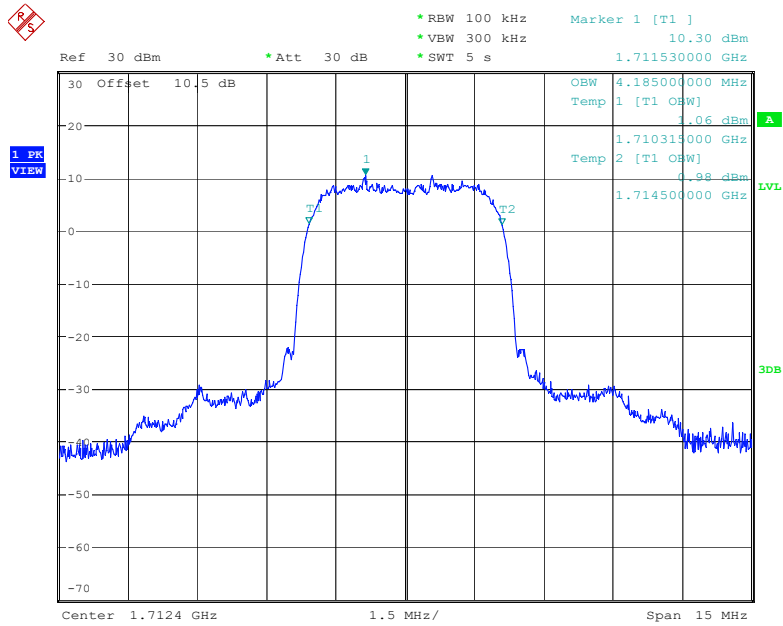
Date: 2.JUL.2022 09:50:52

99% Occupied Bandwidth for HSUPA (QPSK) Mode, High channel



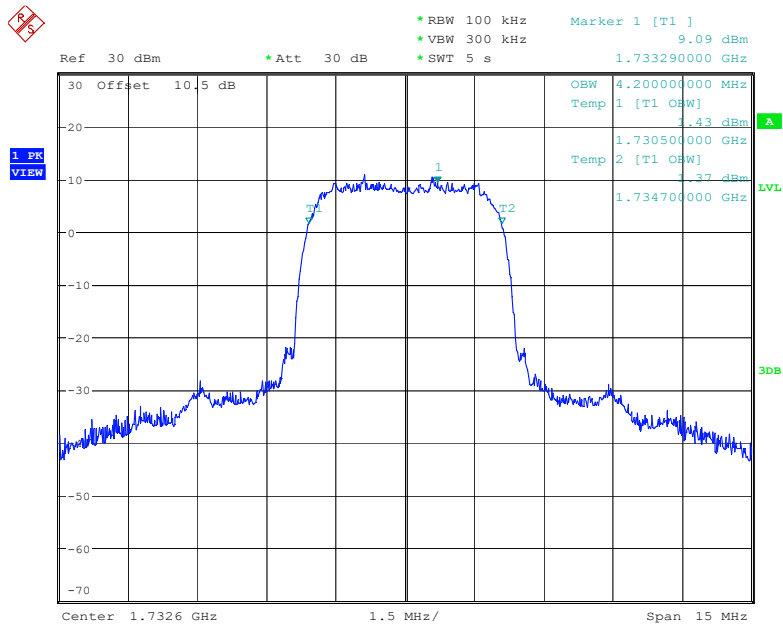
Date: 2.JUL.2022 09:54:10

99% Occupied Bandwidth for HSDPA (16QAM) Mode, Low channel



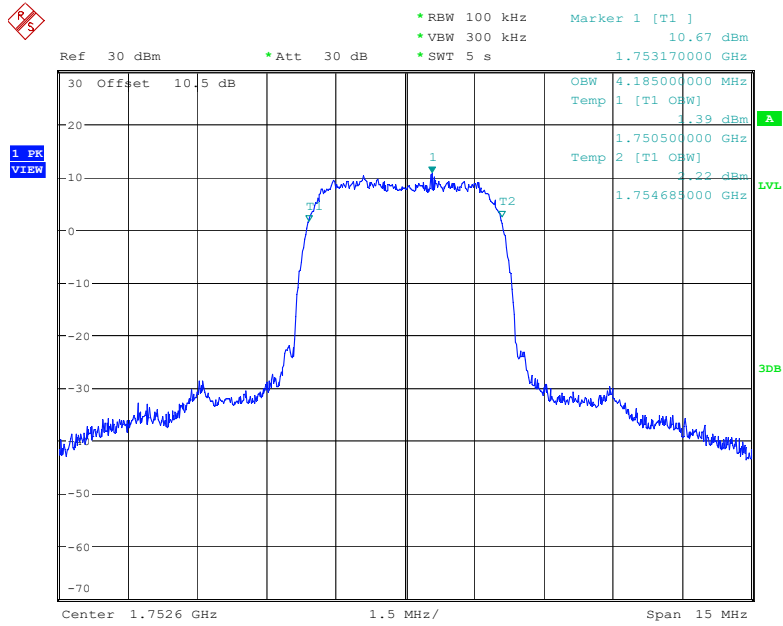
Date: 2.JUL.2022 09:34:42

99% Occupied Bandwidth for HSDPA (16QAM) Mode, Middle channel



Date: 2.JUL.2022 09:38:38

99% Occupied Bandwidth for HSDPA (16QAM) Mode, High channel



Date: 2.JUL.2022 09:41:50

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	1.104	1.284	1.098	1.302	1.104	1.308
	16QAM	1.098	1.290	1.110	1.314	1.092	1.284
3 MHz	QPSK	2.688	2.880	2.688	2.880	2.688	2.892
	16QAM	2.688	2.904	2.688	2.880	2.688	2.892
5 MHz	QPSK	4.520	4.940	4.500	4.960	4.520	4.920
	16QAM	4.500	4.880	4.520	4.980	4.520	4.960
10 MHz	QPSK	8.960	9.680	8.960	9.560	8.960	9.600
	16QAM	8.960	9.600	8.960	9.680	8.960	9.640
15 MHz	QPSK	13.500	14.760	13.500	14.640	13.500	14.820
	16QAM	13.500	14.700	13.560	14.700	13.500	14.700
20 MHz	QPSK	18.000	19.200	18.000	19.440	18.000	19.600
	16QAM	18.000	19.280	18.000	19.440	17.920	19.360

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	1.098	1.308	1.098	1.320	1.098	1.296
	16QAM	1.098	1.320	1.098	1.296	1.098	1.296
3 MHz	QPSK	2.688	2.856	2.688	2.880	2.688	2.892
	16QAM	2.688	2.892	2.688	2.880	2.688	2.880
5 MHz	QPSK	4.520	4.940	4.520	4.960	4.500	4.940
	16QAM	4.500	4.900	4.520	4.960	4.500	4.960
10 MHz	QPSK	9.000	9.560	8.960	9.600	8.960	9.600
	16QAM	8.960	9.520	8.960	9.600	8.960	9.600
15 MHz	QPSK	13.560	14.940	13.500	14.760	13.560	14.820
	16QAM	13.500	14.640	13.500	14.820	13.560	14.700
20 MHz	QPSK	18.000	19.280	18.000	19.280	18.000	19.360
	16QAM	18.000	19.280	18.000	19.440	18.000	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	1.098	1.308	1.104	1.308	1.104	1.290
	16QAM	1.110	1.314	1.098	1.290	1.098	1.290
3 MHz	QPSK	2.688	2.868	2.688	2.880	2.688	2.892
	16QAM	2.688	2.892	2.688	2.880	2.688	2.868
5 MHz	QPSK	4.520	4.920	4.500	4.920	4.520	4.900
	16QAM	4.500	4.940	4.520	4.960	4.520	4.960
10 MHz	QPSK	8.960	9.600	8.960	9.520	8.960	9.640
	16QAM	8.960	9.480	8.960	9.520	8.960	9.560

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	4.936	4.520	4.920	4.500	4.900
	16QAM	4.520	4.936	4.500	4.980	4.500	4.960
10 MHz	QPSK	8.960	9.551	8.960	9.640	8.960	9.600
	16QAM	9.000	9.647	8.960	9.600	8.960	9.640
15 MHz	QPSK	13.500	14.785	13.500	14.760	13.500	14.760
	16QAM	13.500	14.820	13.500	14.760	13.500	14.760
20 MHz	QPSK	17.920	19.280	17.920	19.360	18.000	19.440
	16QAM	18.000	19.200	18.000	19.280	18.000	19.360

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	1.302	1.104	1.326	1.110	1.296
	16QAM	1.104	1.308	1.098	1.290	1.098	1.296
3 MHz	QPSK	2.688	2.880	2.688	2.904	2.688	2.892
	16QAM	2.688	2.868	2.688	2.880	2.676	2.880
5 MHz	QPSK	4.520	5.160	4.540	5.160	4.520	5.120
	16QAM	4.520	5.100	4.520	5.220	4.540	5.180
10 MHz	QPSK	8.960	9.960	8.960	9.800	8.960	9.760
	16QAM	8.960	9.920	9.000	9.840	8.960	9.840

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	5.200	4.540	5.180	4.520	5.200
	16QAM	4.540	5.260	4.540	5.220	4.540	5.160
10 MHz	QPSK	\	\	8.960	9.880	\	\
	16QAM	\	\	8.960	9.800	\	\

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	4.540	5.160	4.520	5.180	4.520	5.140
	16QAM	4.540	5.160	4.540	5.180	4.540	5.200
10 MHz	QPSK	9.000	9.960	8.960	9.800	8.960	9.760
	16QAM	8.960	9.720	8.960	9.840	8.960	9.760

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	4.520	5.020	4.520	5.320	4.520	4.960
	16QAM	4.520	5.100	4.500	5.040	4.500	5.160
10 MHz	QPSK	8.960	9.640	8.960	9.640	8.960	9.720
	16QAM	8.960	9.520	8.960	9.520	8.960	9.960
15 MHz	QPSK	13.560	15.180	13.560	15.660	13.560	15.625
	16QAM	13.560	16.260	13.560	15.780	13.560	16.440
20 MHz	QPSK	18.000	19.360	18.000	19.440	18.000	19.513
	16QAM	18.000	19.731	17.920	19.600	18.000	19.360

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	4.500	4.920	4.520	4.960	4.520	5.000
	16QAM	4.500	5.120	4.500	5.020	4.500	4.980
10 MHz	QPSK	9.000	9.800	8.960	9.680	8.960	9.600
	16QAM	8.960	9.480	8.960	9.520	8.960	10.000
15 MHz	QPSK	13.560	16.490	13.440	15.240	13.500	15.000
	16QAM	13.560	15.540	13.560	15.240	13.560	16.920
20 MHz	QPSK	18.000	19.600	17.920	20.080	18.000	20.080
	16QAM	18.000	19.760	18.000	20.720	18.000	19.680

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	1.098	1.314	1.110	1.296	1.104	1.302
	16QAM	1.092	1.290	1.098	1.290	1.104	1.320
3 MHz	QPSK	2.688	2.880	2.688	2.892	2.688	2.892
	16QAM	2.688	2.892	2.688	2.880	2.688	2.880
5 MHz	QPSK	4.540	5.180	4.520	5.240	4.520	5.100
	16QAM	4.520	5.160	4.540	5.180	4.540	5.200
10 MHz	QPSK	8.960	9.920	8.960	9.880	8.960	9.800
	16QAM	9.000	9.720	9.000	9.880	8.960	9.840
15 MHz	QPSK	13.560	15.300	13.560	15.060	13.620	15.240
	16QAM	13.560	15.060	13.620	15.120	13.620	15.180
20 MHz	QPSK	18.000	19.520	17.920	19.680	18.080	19.821
	16QAM	18.000	19.600	18.000	19.760	18.080	19.600

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

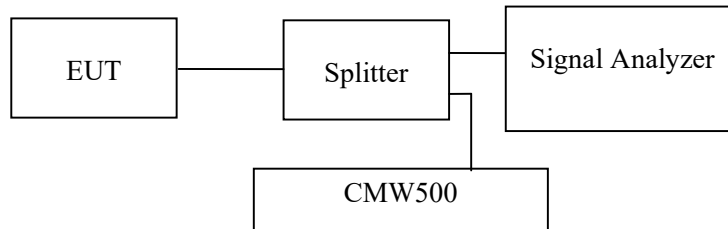
Applicable Standard

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:	27.1~27.3℃
Relative Humidity:	56~56.8 %
ATM Pressure:	101.0 kPa

The testing was performed by Roger Ling from 2022-06-28 to 2022-07-02.

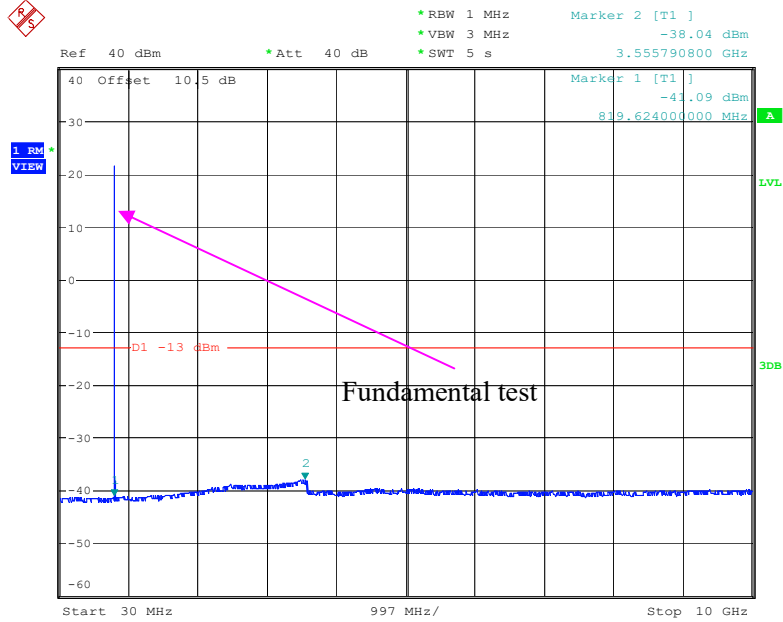
EUT operation mode: Transmitting

Test result: Pass

Please refer to the following plots.

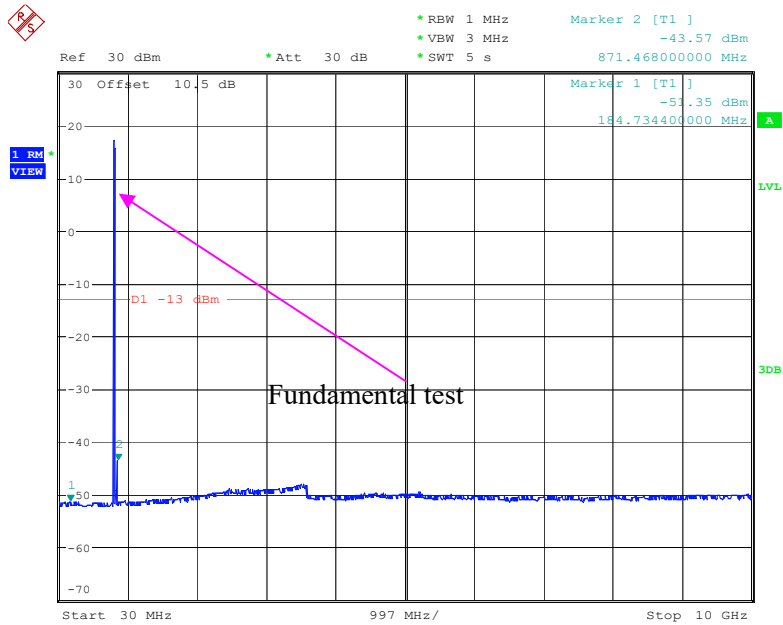
Cellular Band (Part 22H)
Low Channel:

30 MHz – 10GHz (GSM Mode)



Date: 1.JUL.2022 16:32:23

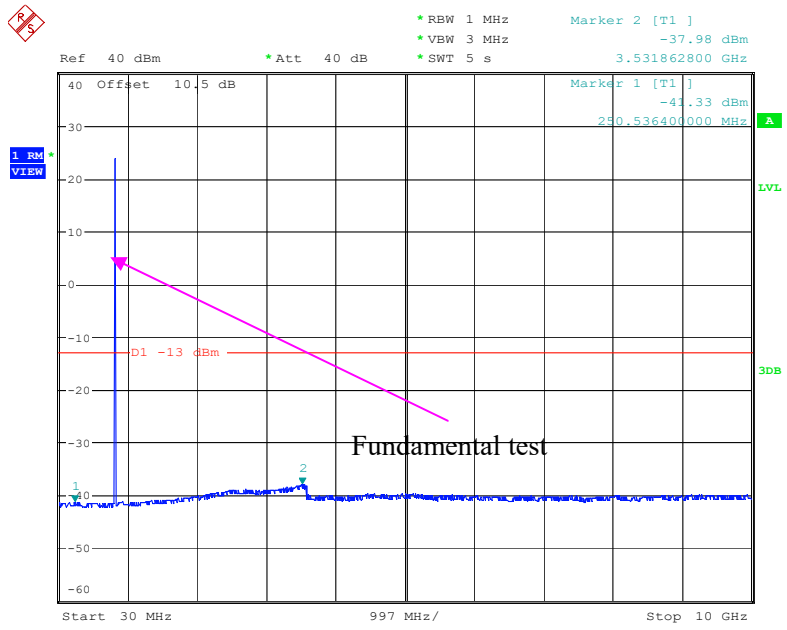
30 MHz – 10 GHz (WCDMA Mode)



Date: 2.JUL.2022 10:01:17

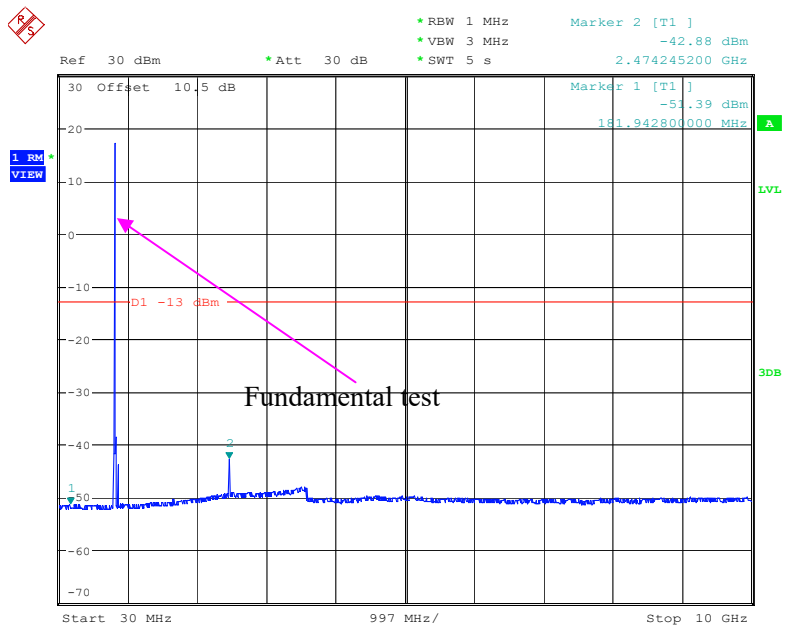
Middle Channel:

30 MHz – 10 GHz (GSM Mode)



Date: 1.JUL.2022 16:36:21

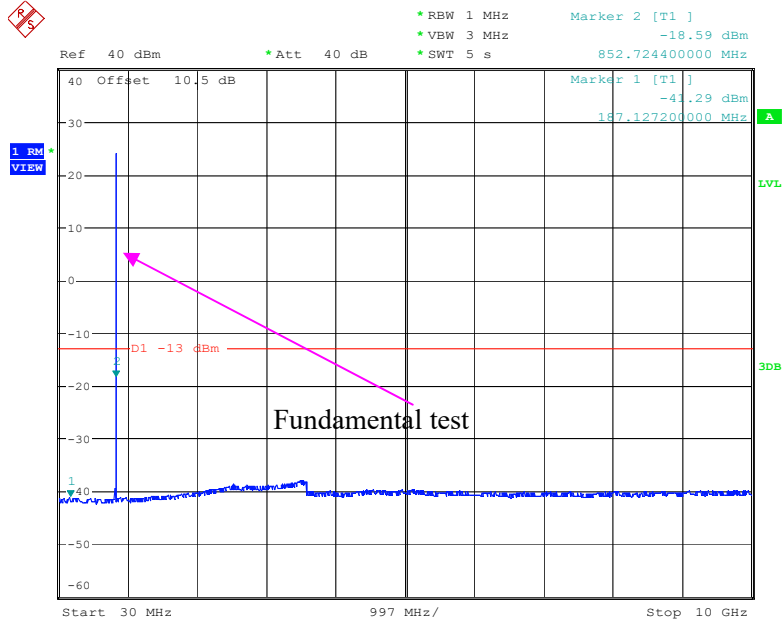
30 MHz – 10 GHz (WCDMA Mode)



Date: 2.JUL.2022 10:03:50

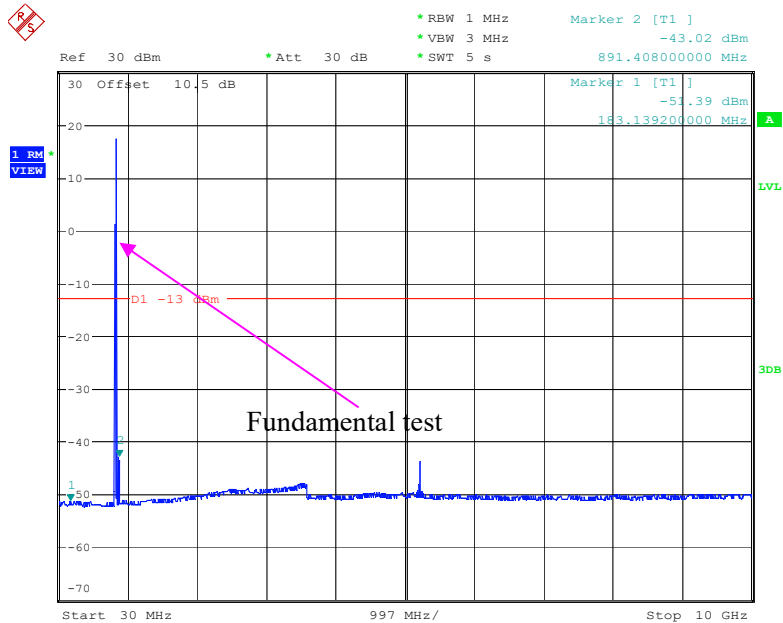
High Channel:

30 MHz – 10 GHz (GSM Mode)



Date: 1.JUL.2022 16:39:16

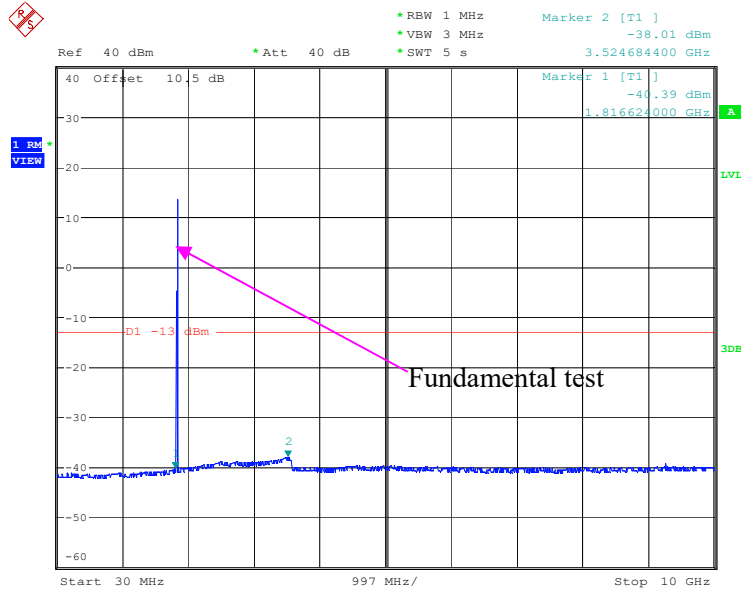
30 MHz – 10 GHz (WCDMA Mode)



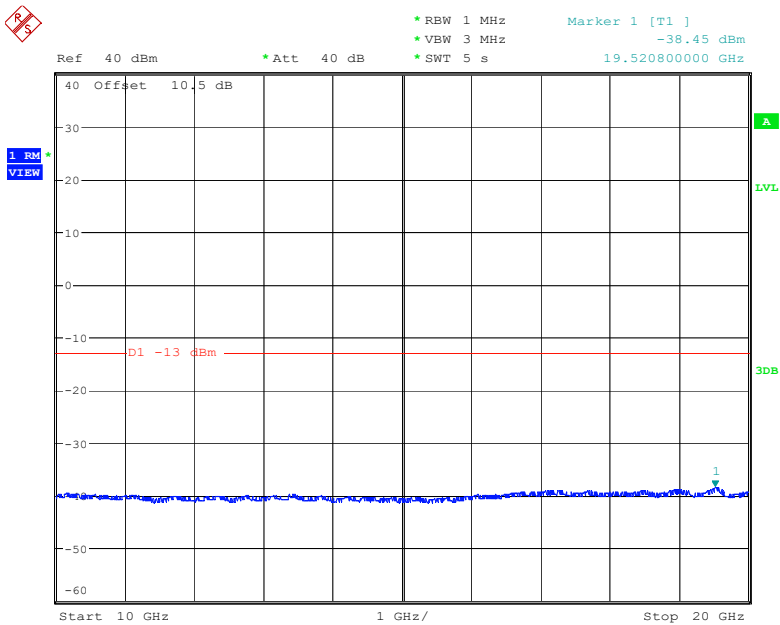
Date: 2.JUL.2022 10:06:55

**PCS Band (Part 24E)
Low Channel:**

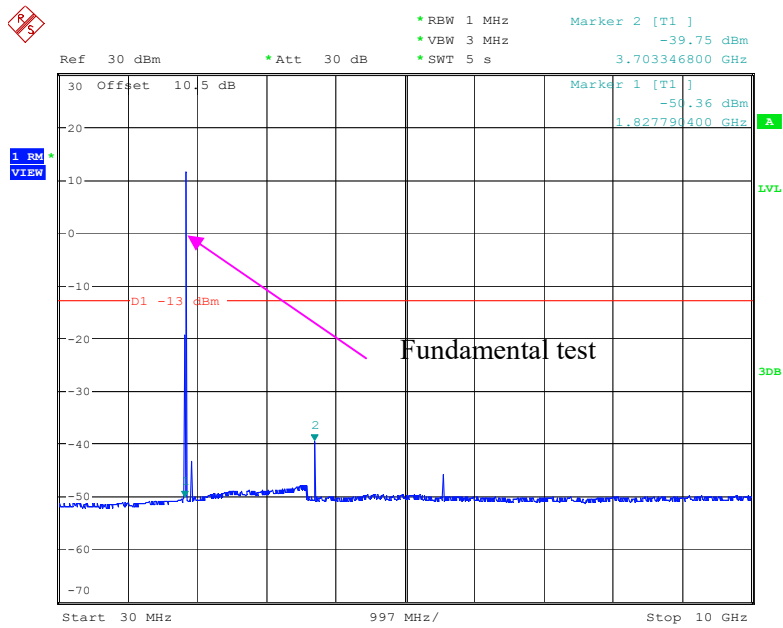
30 MHz – 10 GHz (GSM Mode)



10 GHz – 20 GHz (GSM Mode)

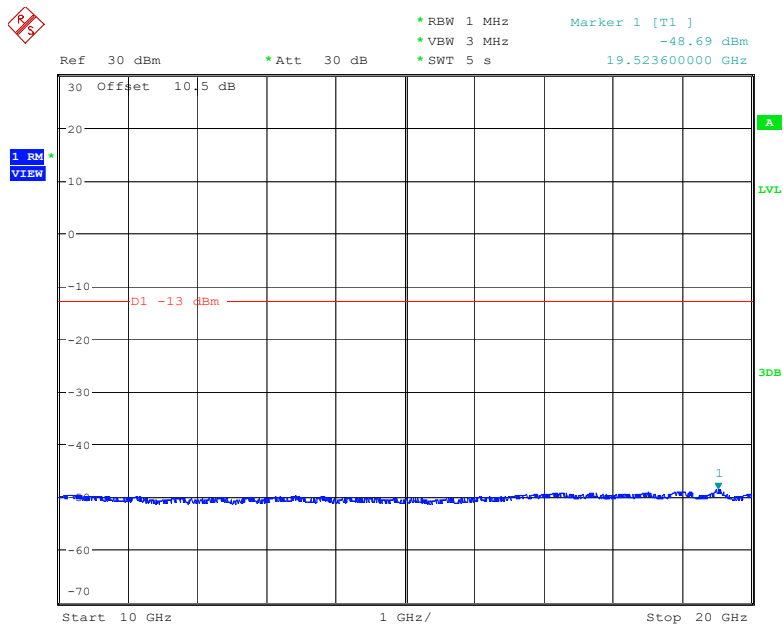


30 MHz – 10 GHz (WCDMA Mode)



Date: 1.JUL.2022 17:09:02

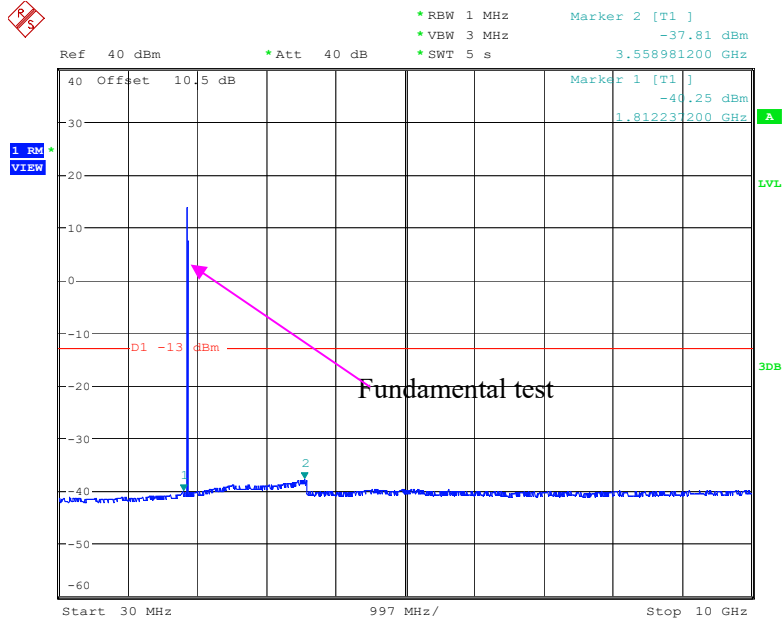
10 GHz – 20GHz (WCDMA Mode)



Date: 1.JUL.2022 17:09:41

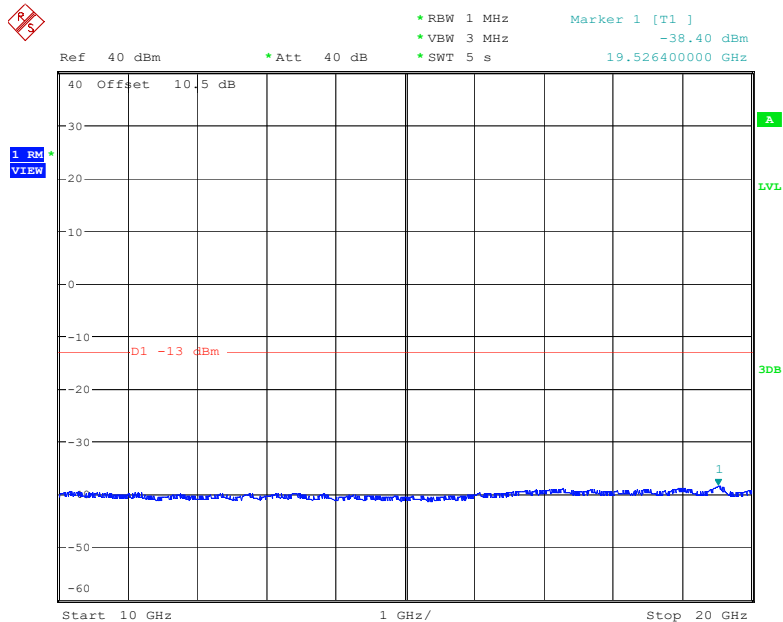
Middle Channel:

30 MHz – 10 GHz (GSM Mode)



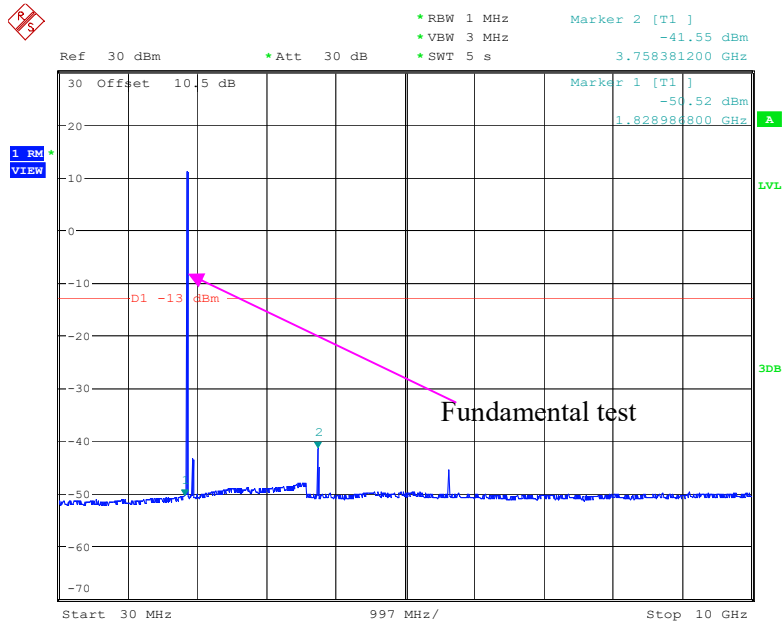
Date: 1.JUL.2022 16:58:41

10 GHz – 20 GHz (GSM Mode)



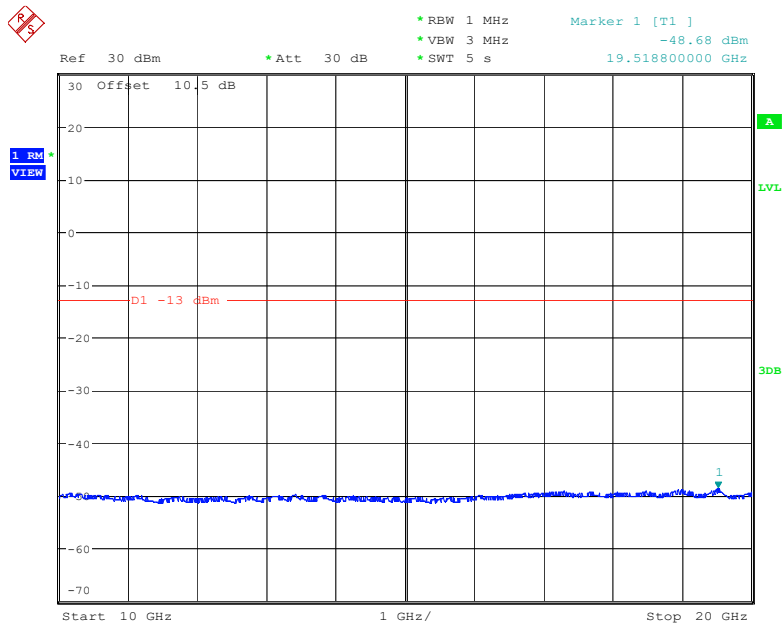
Date: 1.JUL.2022 16:59:21

30 MHz – 10 GHz (WCDMA Mode)



Date: 1.JUL.2022 17:12:10

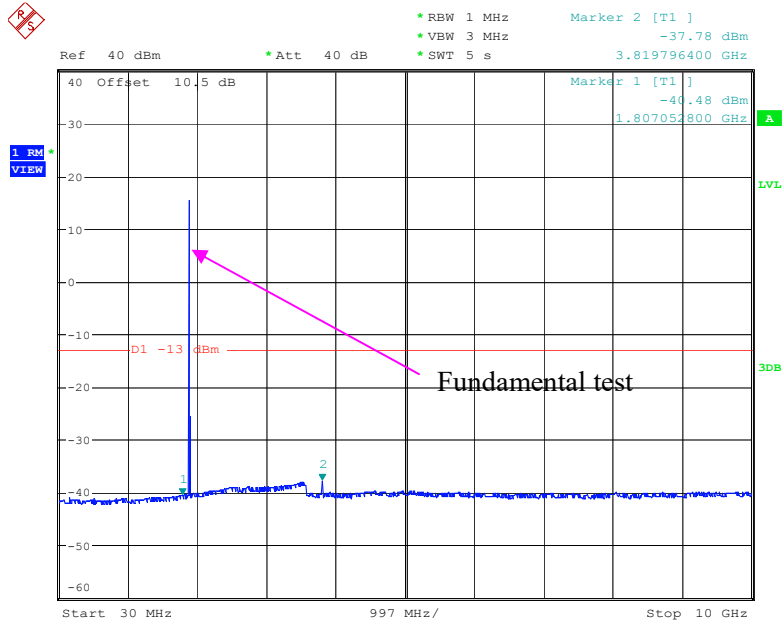
10 GHz – 20GHz (WCDMA Mode)



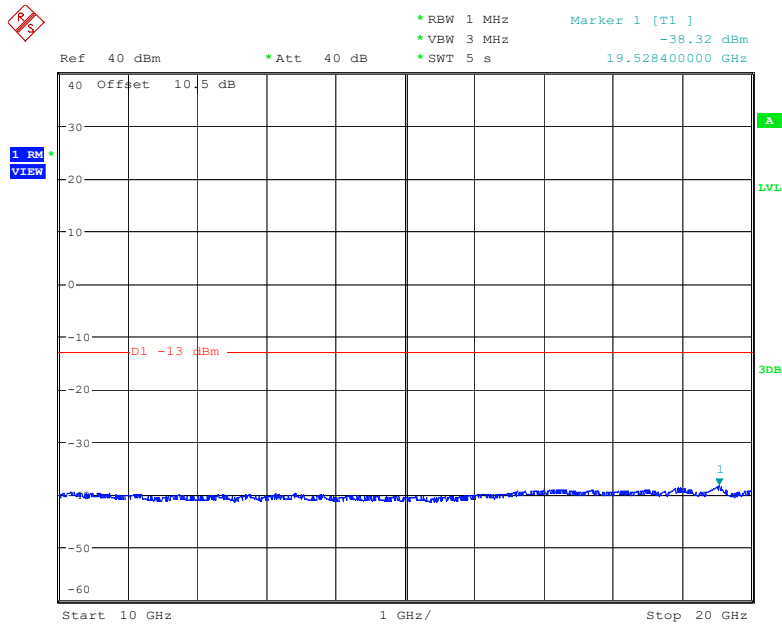
Date: 1.JUL.2022 17:12:49

High Channel:

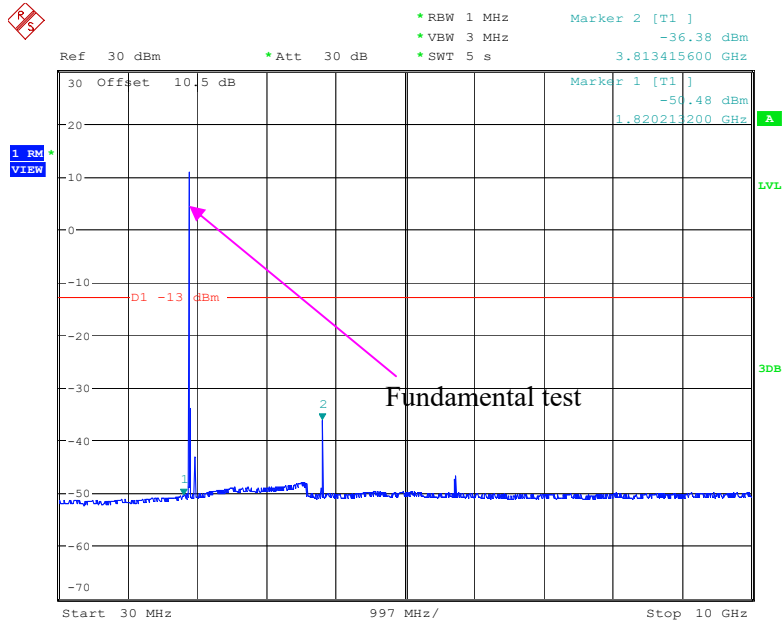
30 MHz – 10 GHz (GSM Mode)



10 GHz – 20 GHz (GSM Mode)

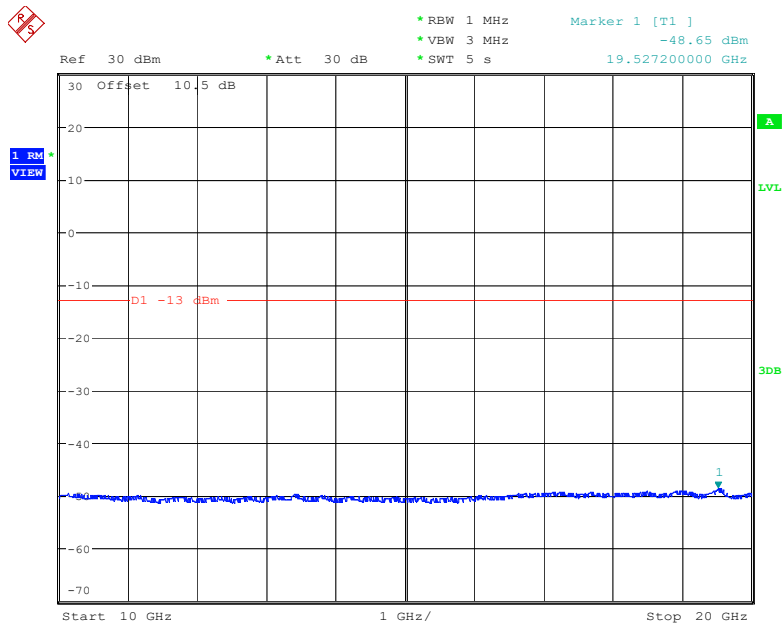


30 MHz – 10 GHz (WCDMA Mode)



Date: 1.JUL.2022 17:38:52

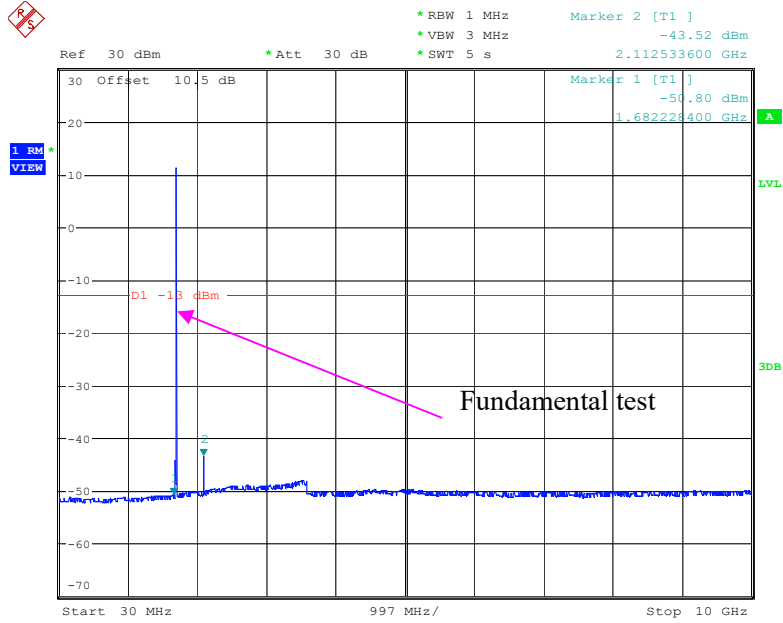
10 GHz – 20 GHz (WCDMA Mode)



Date: 1.JUL.2022 17:39:31

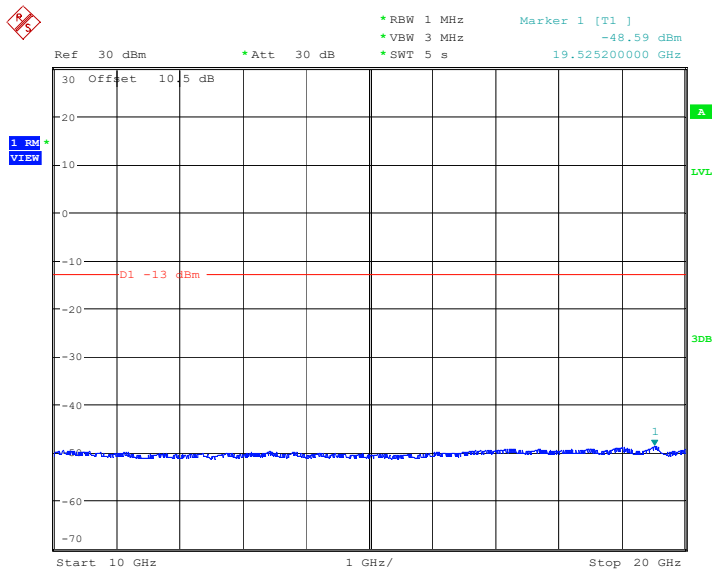
**AWS Band (Part 27)
Low Channel:**

30 MHz – 10 GHz (WCDMA Mode)



Date: 1.JUL.2022 18:38:46

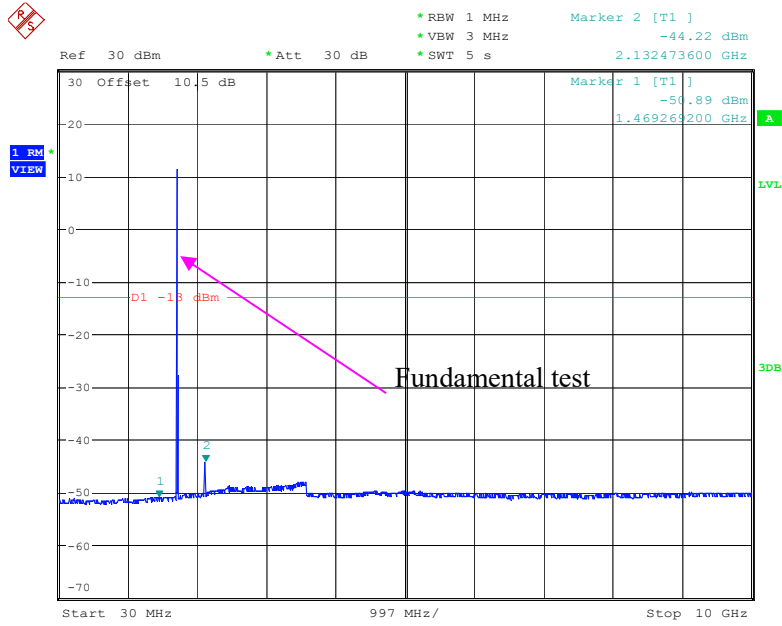
10 GHz – 20 GHz (WCDMA Mode)



Date: 1.JUL.2022 18:39:25

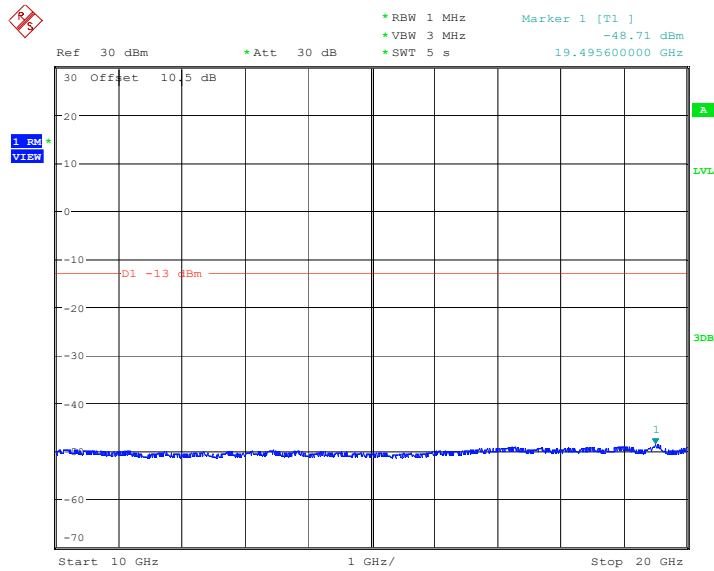
Middle Channel

30 MHz – 10 GHz (WCDMA Mode)



Date: 1.JUL.2022 18:41:57

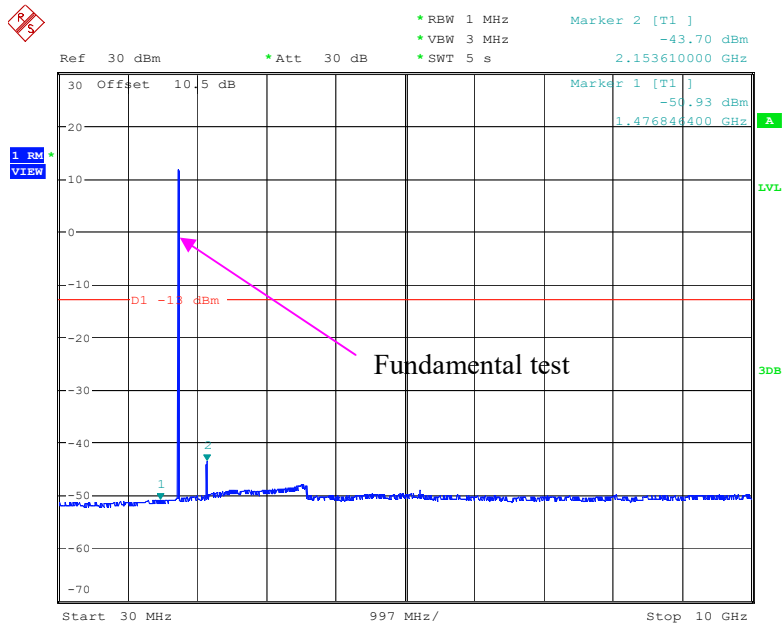
10GHz – 20 GHz (WCDMA Mode)



Date: 1.JUL.2022 18:42:36

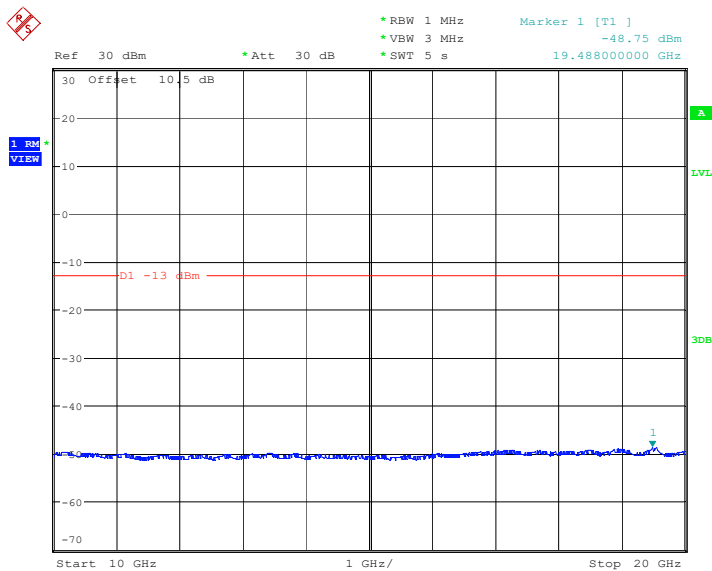
High Channel:

30 MHz – 10 GHz (WCDMA Mode)



Date: 1.JUL.2022 18:45:42

10 GHz – 20 GHz (WCDMA Mode)



Date: 1.JUL.2022 18:46:21

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:	26.5°C
Relative Humidity:	57 %
ATM Pressure:	101.0 kPa

The testing was performed by Jeff Jiang from 2022-06-28 to 2022-07-03.

Test mode: Transmitting (Pre-scan in the X,Y and Z axes of orientation, the worst case Y-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								
952.96	-70.13	153	2.4	H	10.0	-60.13	-13	47.13
952.96	-77.60	68	2.3	V	11.7	-65.90	-13	52.90
1648.4	-48.4	344	1.8	H	3.5	-44.9	-13	31.9
1648.4	-50.9	93	2.1	V	3.1	-47.8	-13	34.8
2472.6	-53.3	317	1.7	H	6.6	-46.7	-13	33.7
2472.6	-51.2	292	2.4	V	5.8	-45.4	-13	32.4
3296.8	-49.6	355	1.4	H	6.4	-43.2	-13	30.2
3296.8	-50.6	291	2.2	V	5.7	-44.9	-13	31.9
Middle Channel								
957.00	-70.13	153	2.0	H	10.0	-60.13	-13	47.13
957.00	-76.91	129	1.8	V	11.7	-65.21	-13	52.21
1672.8	-49.5	10	2.0	H	3.8	-45.7	-13	32.7
1672.8	-49.9	83	1.5	V	3.1	-46.8	-13	33.8
2509.8	-52.6	54	1.8	H	6.2	-46.4	-13	33.4
2509.8	-51.1	294	2.2	V	5.5	-45.6	-13	32.6
3345.6	-51.0	349	1.6	H	6.6	-44.4	-13	31.4
3345.6	-50.7	18	1.2	V	5.4	-45.3	-13	32.3
High Channel								
956.99	-71.38	172	1.9	H	10.0	-61.38	-13	48.38
956.99	-76.37	272	1.8	V	11.7	-64.67	-13	51.67
1697.6	-49.9	305	1.2	H	4.1	-45.8	-13	32.8
1697.6	-50.5	130	1.6	V	3.1	-47.4	-13	34.4
2546.4	-52.9	174	1.2	H	6.1	-46.8	-13	33.8
2546.4	-51.3	277	1.1	V	5.8	-45.5	-13	32.5
3395.2	-50.0	320	2.0	H	6.2	-43.8	-13	30.8
3395.2	-49.3	357	1.6	V	5.4	-43.9	-13	30.9

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								
956.49	-71.91	35	1.9	H	10.0	-61.91	-13	48.91
956.49	-76.64	313	1.6	V	11.7	-64.94	-13	51.94
1652.8	-57.6	222	1.2	H	3.5	-54.1	-13	41.1
1652.8	-52.5	210	1.6	V	3.1	-49.4	-13	36.4
2479.2	-58.0	216	1.9	H	6.6	-51.4	-13	38.4
2479.2	-56.5	62	2.1	V	5.8	-50.7	-13	37.7
3305.6	-52.7	37	1.0	H	6.4	-46.3	-13	33.3
3305.6	-52.4	167	1.2	V	5.7	-46.7	-13	33.7
Middle Channel								
955.03	-70.65	222	1.7	H	10.0	-60.65	-13	47.65
955.03	-75.97	204	1.4	V	11.7	-64.27	-13	51.27
1673.2	-58.1	216	1.8	H	3.5	-54.6	-13	41.6
1673.2	-56.5	354	2.3	V	3.1	-53.4	-13	40.4
2509.8	-57.5	294	1.7	H	6.6	-50.9	-13	37.9
2509.8	-56.9	105	2.5	V	5.8	-51.1	-13	38.1
3345.6	-52.7	249	2.3	H	6.4	-46.3	-13	33.3
3345.6	-51.7	358	2.0	V	5.7	-46.0	-13	33.0
High Channel								
954.17	-70.29	218	2.4	H	10.0	-60.29	-13	47.29
954.17	-76.65	280	1.9	V	11.7	-64.95	-13	51.95
1693.2	-58.2	26	1.7	H	4.1	-54.1	-13	41.1
1693.2	-56.7	87	2.2	V	3.1	-53.6	-13	40.6
2539.8	-57.2	333	1.2	H	6.1	-51.1	-13	38.1
2539.8	-56.5	52	1.4	V	5.8	-50.7	-13	37.7
3386.4	-52.6	175	1.7	H	6.2	-46.4	-13	33.4
3386.4	-51.4	10	1.7	V	5.4	-46.0	-13	33.0

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								
953.50	-71.82	82	2.2	H	10.0	-61.82	-13	48.82
953.50	-77.11	350	2.2	V	11.7	-65.41	-13	52.41
3700.4	-52.0	103	2.3	H	8.1	-43.9	-13	30.9
3700.4	-53.3	33	1.2	V	7.6	-45.7	-13	32.7
Middle Channel								
953.09	-72.60	84	2.4	H	10.0	-62.60	-13	49.60
953.09	-75.35	315	1.6	V	11.7	-63.65	-13	50.65
3760	-52.3	332	1.3	H	8.8	-43.5	-13	30.5
3760	-53.0	144	2.4	V	8	-45.0	-13	32.0
High Channel								
956.47	-71.11	110	1.7	H	10.0	-61.11	-13	48.11
956.47	-77.23	112	1.3	V	11.7	-65.53	-13	52.53
3819.6	-52.3	75	1.2	H	8.7	-43.6	-13	30.6
3819.6	-53.2	278	2.1	V	8	-45.2	-13	32.2

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
WCDMA Band 2								
Low Channel								
952.89	-72.56	265	1.1	H	10.0	-62.56	-13	49.56
952.89	-76.91	51	2.3	V	11.7	-65.21	-13	52.21
3704.8	-48.2	118	1.9	H	8.1	-40.1	-13	27.1
3704.8	-51.4	46	1.7	V	7.6	-43.8	-13	30.8
Middle Channel								
956.73	-72.17	288	2.1	H	10.0	-62.17	-13	49.17
956.73	-76.02	205	1.6	V	11.7	-64.32	-13	51.32
3760	-48.3	5	1.4	H	8.8	-39.5	-13	26.5
3760	-51.3	213	2.0	V	8	-43.3	-13	30.3
High Channel								
952.35	-72.24	11	1.4	H	10.0	-62.24	-13	49.24
952.35	-77.33	195	2.0	V	11.7	-65.63	-13	52.63
3815.2	-47.8	148	1.5	H	8.7	-39.1	-13	26.1
3815.2	-51.0	54	1.1	V	8	-43.0	-13	30.0

30MHz-20GHz:**AWS Band (Part 27E)**

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 4								
Low Channel								
954.25	-71.24	39	2.4	H	10.0	-61.24	-13	48.24
954.25	-75.22	304	1.4	V	11.7	-63.52	-13	50.52
3424.8	-45.7	141	2.2	H	6.4	-39.3	-13	26.3
3424.8	-48.5	336	1.7	V	5.7	-42.8	-13	29.8
Middle Channel								
955.03	-72.64	180	1.4	H	10.0	-62.64	-13	49.64
955.03	-77.06	150	2.1	V	11.7	-65.36	-13	52.36
3465.2	-44.5	52	1.2	H	7	-37.5	-13	24.5
3465.2	-49.3	301	2.0	V	6.2	-43.1	-13	30.1
High Channel								
955.21	-70.53	306	2.2	H	10.0	-60.53	-13	47.53
955.21	-75.91	320	1.5	V	11.7	-64.21	-13	51.21
3505.2	-46.0	211	1.7	H	7.8	-38.2	-13	25.2
3505.2	-48.8	44	2.0	V	6.6	-42.2	-13	29.2

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								
956.13	-72.29	86	2.3	H	10.0	-62.29	-13	49.29
956.13	-77.46	107	1.8	V	11.7	-65.76	-13	52.76
3701.4	-48.4	16	2.1	H	8.1	-40.3	-13	27.3
3701.4	-50.6	189	1.1	V	7.6	-43	-13	30.0
QPSK, 1.4MHz bandwidth, Middle Channel								
952.23	-70.75	188	1.6	H	10.0	-60.75	-13	47.75
952.23	-75.35	161	2.3	V	11.7	-63.65	-13	50.65
3760	-50.4	334	2.1	H	8.8	-41.6	-13	28.6
3760	-52.6	303	1.7	V	8	-44.6	-13	31.6
QPSK, 1.4MHz bandwidth, High Channel								
951.96	-72.08	80	1.8	H	10.0	-62.08	-13	49.08
951.96	-74.71	241	1.9	V	11.7	-63.01	-13	50.01
3818.6	-47.4	313	2.3	H	8.7	-38.7	-13	25.7
3818.6	-51.7	41	2.2	V	8	-43.7	-13	30.7

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								
954.82	-70.88	138	2.1	H	10.0	-60.88	-13	47.88
954.82	-74.97	277	1.5	V	11.7	-63.27	-13	50.27
3421.4	-46.5	345	2.2	H	6.4	-40.1	-13	27.1
3421.4	-48.5	151	2.1	V	5.7	-42.8	-13	29.8
QPSK, 1.4MHz bandwidth, Middle Channel								
950.96	-72.65	183	1.1	H	10.0	-62.65	-13	49.65
950.96	-74.71	277	2.2	V	11.7	-63.01	-13	50.01
3465	-44.9	93	1.9	H	7	-37.9	-13	24.9
3465	-49.0	90	2.2	V	6.2	-42.8	-13	29.8
QPSK, 1.4MHz bandwidth, High Channel								
954.06	-72.29	329	1.6	H	10.0	-62.29	-13	49.29
954.06	-77.41	48	2.2	V	11.7	-65.71	-13	52.71
3508.6	-44.3	206	2.3	H	7.8	-36.5	-13	23.5
3508.6	-49.6	51	2.3	V	6.6	-43.0	-13	30.0

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								
950.71	-71.45	253	1.3	H	10.0	-61.45	-13	48.45
950.71	-77.05	94	1.9	V	11.7	-65.35	-13	52.35
1649.4	-55.5	225	1.1	H	3.5	-52	-13	39.0
1649.4	-54.7	342	1.7	V	3.1	-51.6	-13	38.6
2474.1	-54.0	142	1.4	H	6.6	-47.4	-13	34.4
2474.1	-52.7	136	2.0	V	5.8	-46.9	-13	33.9
3298.8	-52.7	145	1.1	H	6.4	-46.3	-13	33.3
3298.8	-51.6	154	1.3	V	5.7	-45.9	-13	32.9
QPSK, 1.4MHz bandwidth, Middle Channel								
954.27	-72.91	61	2.2	H	10.0	-62.91	-13	49.91
954.27	-75.30	47	1.2	V	11.7	-63.60	-13	50.60
1673	-54.3	157	2.5	H	3.8	-50.5	-13	37.5
1673	-52.9	324	2.3	V	3.1	-49.8	-13	36.8
2509.5	-53.6	301	1.5	H	6.2	-47.4	-13	34.4
2509.5	-51.5	244	2.3	V	5.5	-46.0	-13	33.0
3346	-53.2	219	1.2	H	6.6	-46.6	-13	33.6
3346	-51.5	345	2.0	V	5.4	-46.1	-13	33.1
QPSK, 1.4MHz bandwidth, High Channel								
954.66	-70.67	193	2.4	H	10.0	-60.67	-13	47.67
954.66	-74.90	261	2.0	V	11.7	-63.20	-13	50.20
1696.6	-54.6	134	1.8	H	4.1	-50.5	-13	37.5
1696.6	-52.9	246	2.0	V	3.1	-49.8	-13	36.8
2544.9	-51.7	56	1.8	H	6.1	-45.6	-13	32.6
2544.9	-53.4	204	2.0	V	5.8	-47.6	-13	34.6
3393.2	-52.9	237	2.3	H	6.2	-46.7	-13	33.7
3393.2	-51.3	316	1.7	V	5.4	-45.9	-13	32.9

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								
950.33	-70.55	110	1.8	H	10.0	-60.55	-25	35.55
950.33	-76.63	312	1.0	V	11.7	-64.93	-25	39.93
5005	-55.5	165	2.4	H	10.8	-44.7	-25	19.7
5005	-55.8	172	1.1	V	10.2	-45.6	-25	20.6
QPSK, 5MHz bandwidth, Middle Channel								
954.26	-70.07	56	1.6	H	9.8	-60.27	-25	35.27
954.26	-77.47	208	2.3	V	11.7	-65.77	-25	40.77
5070	-54.0	25	1.6	H	11.1	-42.9	-25	17.9
5070	-56.0	121	1.6	V	10.8	-45.2	-25	20.2
QPSK, 5MHz bandwidth, High Channel								
954.94	-70.16	331	1.7	H	10.0	-60.16	-25	35.16
954.94	-76.27	172	2.4	V	11.7	-64.57	-25	39.57
5135	-55.3	87	2.4	H	11.3	-44	-25	19.0
5135	-55.6	297	1.8	V	10.8	-44.8	-25	19.8

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 12								
Test frequency range: 30MHz-8GHz								
QPSK, 1.4MHz bandwidth, Low Channel								
955.84	-62.62	247	1.6	H	-0.2	-62.82	-13	48.03
955.84	-68.38	106	1.0	V	3.1	-65.28	-13	52.29
1399.4	-62.2	82	1.2	H	5.9	-56.3	-13	43.3
1399.4	-62.2	31	2.2	V	5.9	-56.3	-13	43.3
2099.1	-51.2	56	1.1	H	6.3	-44.9	-13	31.9
2099.1	-52.3	329	1.2	V	5.1	-47.2	-13	34.2
QPSK, 1.4MHz bandwidth, Middle Channel								
950.90	-60.96	2	2.2	H	-0.2	-61.16	-13	48.90
950.90	-70.85	319	1.6	V	3.1	-67.75	-13	52.63
1415	-63.5	277	1.7	H	5.7	-57.8	-13	44.8
1415	-61.6	165	1.0	V	5.4	-56.2	-13	43.2
2122.5	-55.1	73	1.9	H	6.7	-48.4	-13	35.4
2122.5	-54.4	334	1.2	V	5.8	-48.6	-13	35.6
QPSK, 1.4MHz bandwidth, High Channel								
954.31	-62.98	295	2.1	H	-0.2	-63.18	-13	47.84
954.31	-68.52	211	2.2	V	3.1	-65.42	-13	50.43
1430.6	-60.5	72	1.3	H	5.4	-55.1	-13	42.1
1430.6	-61.3	147	1.4	V	4.8	-56.5	-13	43.5
2145.9	-51.1	77	1.5	H	7	-44.1	-13	31.1
2145.9	-52.7	45	1.7	V	6.6	-46.1	-13	33.1

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 13								
Test frequency range: 30MHz-8GHz								
QPSK, 5MHz bandwidth, Low Channel								
955.17	-60.83	83	1.6	H	-0.2	-61.03	-13	48.03
955.17	-67.07	102	1.7	V	3.1	-63.97	-13	50.97
1559	-57.9	157	2.5	H	4.2	-53.7	-40	13.7
1559	-58.4	347	2.0	V	3.3	-55.1	-40	15.1
2338.5	-57.5	133	1.0	H	7.3	-50.2	-13	37.2
2338.5	-57.2	141	1.5	V	6.5	-50.7	-13	37.7
3118	-54.4	123	1.5	H	7.3	-47.1	-13	34.1
3118	-54.3	293	1.2	V	6.5	-47.8	-13	34.8
QPSK, 5MHz bandwidth, Middle Channel								
951.25	-70.10	184	1.3	H	10.0	-60.10	-13	47.10
951.25	-75.44	257	2.2	V	11.7	-63.74	-13	50.74
1564	-57.5	100	1.4	H	4.2	-53.3	-40	13.3
1564	-58.2	84	1.7	V	3.3	-54.9	-40	14.9
2346	-56.9	48	1.3	H	7.3	-49.6	-13	36.6
2346	-57.2	53	1.7	V	6.4	-50.8	-13	37.8
3128	-54.7	104	2.4	H	7.3	-47.4	-13	34.4
3128	-53.7	234	1.1	V	6.6	-47.1	-13	34.1
QPSK, 5MHz bandwidth, High Channel								
953.23	-70.62	49	2.1	H	10.0	-60.62	-13	47.62
953.23	-76.41	222	1.6	V	11.7	-64.71	-13	51.71
1569	-57.5	43	2.2	H	4.2	-53.3	-40	13.3
1569	-58.6	306	1.7	V	3.3	-55.3	-40	15.3
2353.5	-56.5	158	1.6	H	7.3	-49.2	-13	36.2
2353.5	-55.7	42	1.4	V	6.4	-49.3	-13	36.3
3138	-55.4	38	1.3	H	7.4	-48.0	-13	35.0
3138	-53.6	111	1.1	V	6.6	-47.0	-13	34.0

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 17								
Test frequency range: 30MHz-8GHz								
QPSK, 5MHz bandwidth, Low Channel								
951.80	-70.75	188	2.3	H	10.0	-60.75	-13	47.75
951.80	-75.01	117	1.3	V	11.7	-63.31	-13	50.31
1413	-62.1	150	2.3	H	5.7	-56.4	-13	43.4
1413	-62.2	70	1.3	V	5.4	-56.8	-13	43.8
2119.5	-50.5	334	1.5	H	6.6	-43.9	-13	30.9
2119.5	-52.1	324	2.4	V	5.7	-46.4	-13	33.4
2826	-57.7	154	1.0	H	7.1	-50.6	-13	37.6
2826	-57.0	124	1.9	V	6.5	-50.5	-13	37.5
QPSK, 5MHz bandwidth, Middle Channel								
953.88	-70.46	228	1.7	H	10.0	-60.46	-13	47.46
953.88	-77.67	242	2.2	V	11.7	-65.97	-13	52.97
1420	-61.8	266	2.4	H	5.6	-56.2	-13	43.2
1420	-61.4	308	1.7	V	5.2	-56.2	-13	43.2
2130	-48.5	313	2.1	H	6.8	-41.7	-13	28.7
2130	-50.1	62	1.7	V	6.1	-44	-13	31.0
2840	-57.9	335	1.9	H	7	-50.9	-13	37.9
2840	-57.0	345	1.7	V	6.6	-50.4	-13	37.4
QPSK, 5MHz bandwidth, High Channel								
952.24	-70.98	121	1.8	H	10.0	-60.98	-13	47.98
952.24	-74.82	168	1.9	V	11.7	-63.12	-13	50.12
1427	-62.2	154	2.1	H	5.5	-56.7	-13	43.7
1427	-61.3	311	1.9	V	4.9	-56.4	-13	43.4
2140.5	-48.9	121	2.4	H	7	-41.9	-13	28.9
2140.5	-51.0	296	1.1	V	6.4	-44.6	-13	31.6
2854	-58.5	87	1.0	H	7.4	-51.1	-13	38.1
2854	-58.0	122	1.4	V	6.4	-51.6	-13	38.6

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 38								
Test frequency range: 30MHz-26.5GHz								
QPSK, 5MHz, Low Channel								
950.94	-71.60	242	2.3	H	10.0	-61.60	-25	36.60
950.94	-76.34	219	1.1	V	11.7	-64.64	-25	39.64
5145	-54.4	116	1.0	H	11.4	-43.0	-25	18.0
5145	-51.6	283	1.2	V	10.7	-40.9	-25	15.9
QPSK, 5MHz, Middle Channel								
952.25	-84.79	15	1.4	H	10.0	-74.79	-25	49.79
952.25	-87.63	75	1.2	V	11.7	-75.93	-25	50.93
5190	-53.3	245	2.0	H	10.5	-42.8	-25	17.8
5190	-52.2	88	2.2	V	10	-42.2	-25	17.2
QPSK, 5MHz, High Channel								
950.65	-71.86	7	1.7	H	10.0	-61.86	-25	36.86
950.65	-75.81	307	1.4	V	11.7	-64.11	-25	39.11
5235	-52.5	182	1.6	H	9.7	-42.8	-25	17.8
5235	-50.2	63	2.1	V	9.3	-40.9	-25	15.9

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 41								
Test frequency range: 30-26.5GHz								
QPSK, 5MHz, Low Channel								
953.33	-71.69	162	1.3	H	10.0	-61.69	-25	36.69
953.33	-75.31	176	1.7	V	11.7	-63.61	-25	38.61
5075	-54.2	176	2.0	H	11.2	-43	-25	18.0
5075	-50.7	247	1.6	V	10.8	-39.9	-25	14.9
QPSK, 5MHz bandwidth, Middle Channel								
954.50	-70.19	42	1.9	H	10.0	-60.19	-25	35.19
954.50	-76.16	258	2.3	V	11.7	-64.46	-25	39.46
5190	-54.0	215	1.2	H	10.52	-43.5	-25	18.5
5190	-50.0	302	2.2	V	10	-40.0	-25	15.0
QPSK, 5MHz bandwidth, High Channel								
954.81	-70.54	84	1.8	H	10.0	-60.54	-25	35.54
954.81	-77.62	206	2.1	V	11.7	-65.92	-25	40.92
5305	-52.3	128	1.9	H	9.6	-42.7	-25	17.7
5305	-48.4	284	1.2	V	8.8	-39.6	-25	14.6

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: 30-20GHz								
QPSK, 1.4MHz, Low Channel								
955.27	-72.62	107	1.6	H	10.0	-62.62	-13	49.62
955.27	-74.72	208	1.7	V	11.7	-63.02	-13	50.02
3421.4	-46.7	348	1.3	H	6.4	-40.32	-13	27.3
3421.4	-45.2	58	1.5	V	5.7	-39.5	-13	26.5
5132.1	-55.2	295	1.9	H	11.7	-43.5	-13	30.5
5132.1	-55.1	269	1.2	V	10.8	-44.3	-13	31.3
QPSK, 1.4MHz bandwidth, Middle Channel								
953.70	-72.80	103	1.4	H	10.0	-62.80	-13	49.80
953.70	-77.60	160	1.1	V	11.7	-65.90	-13	52.90
3510	-47.6	159	1.7	H	7.8	-39.8	-13	26.8
3510	-47.0	109	1.1	V	6.6	-40.4	-13	27.4
5265	-54.1	239	1.0	H	9.5	-44.6	-13	31.6
5265	-52.7	158	2.0	V	8.9	-43.8	-13	30.8
QPSK, 1.4MHz bandwidth, High Channel								
950.94	-70.98	149	1.9	H	10.0	-60.98	-13	47.98
950.94	-76.54	199	1.0	V	11.7	-64.84	-13	51.84
3558.6	-47.6	83	1.0	H	7.8	-39.8	-13	26.8
3558.6	-47.7	116	2.2	V	7	-40.7	-13	27.7
5337.9	-54.7	238	2.2	H	9.4	-45.3	-13	32.3
5337.9	-54.6	78	1.5	V	8.7	-45.9	-13	32.9

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.

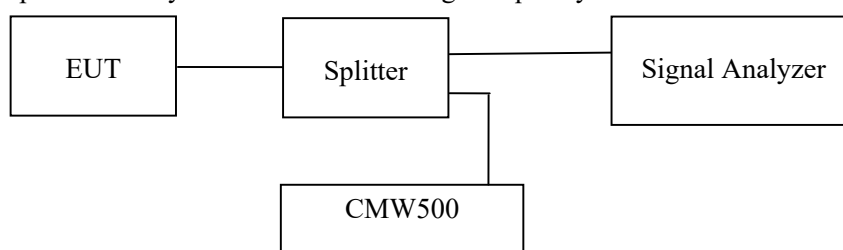
According to §24.238(a), the power of any emissions outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

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

Test Procedure

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



Test Data

Environmental Conditions

Temperature:	27.1~27.3℃
Relative Humidity:	56~56.8 %
ATM Pressure:	101.0 kPa

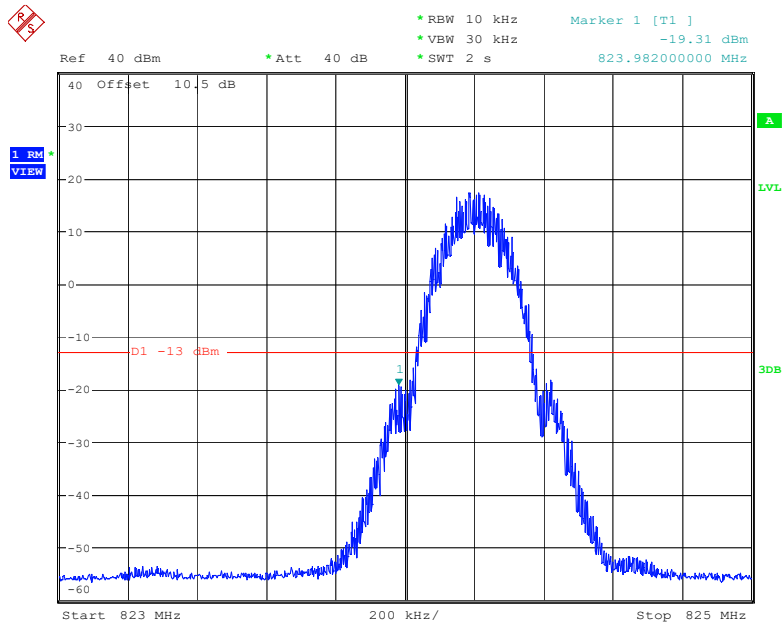
The testing was performed by Roger Ling from 2022-06-28 to 2022-07-02.

EUT operation mode: Transmitting (Worst case)

Test Result: Pass

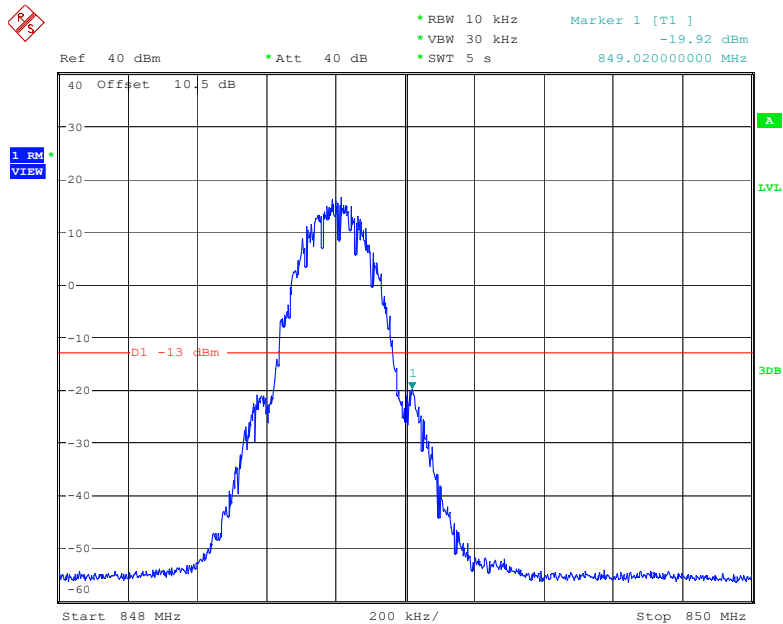
Please refer to the following plots.

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



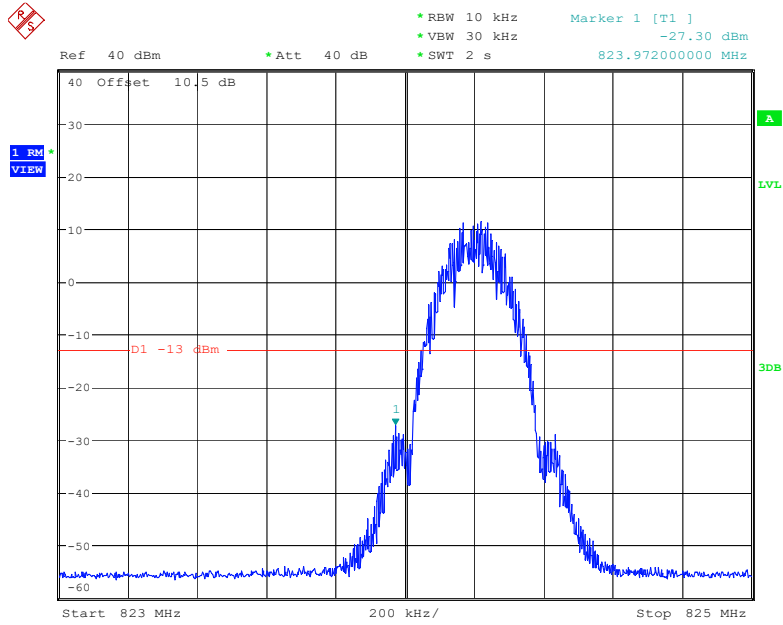
Date: 1.JUL.2022 16:31:43

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



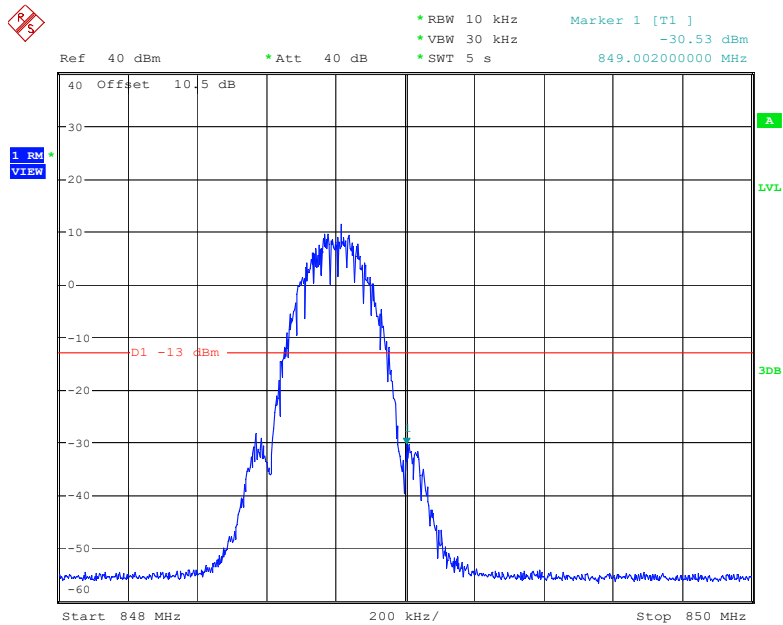
Date: 1.JUL.2022 16:38:38

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



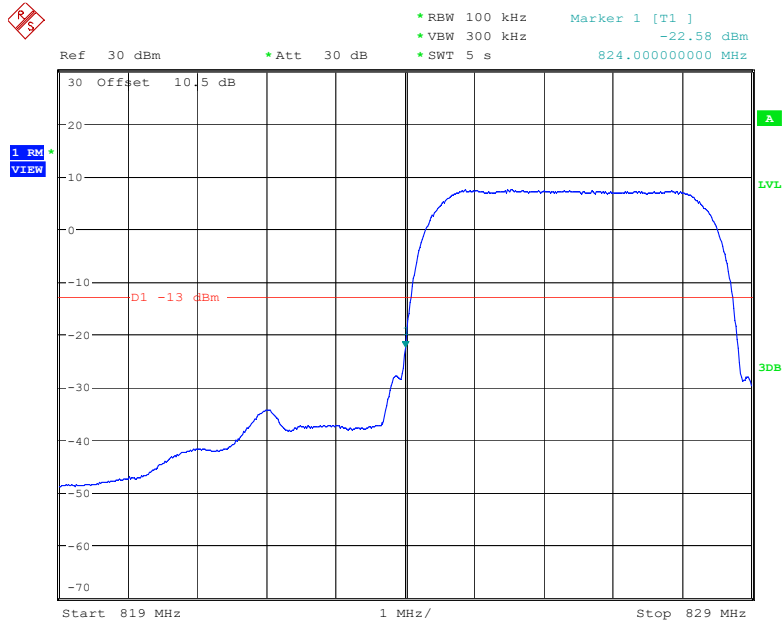
Date: 1.JUL.2022 16:20:20

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



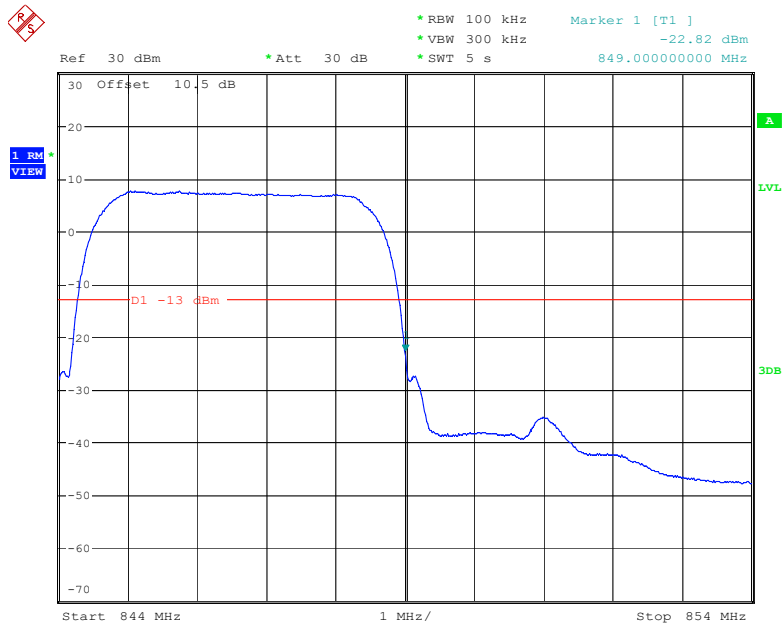
Date: 1.JUL.2022 16:28:22

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



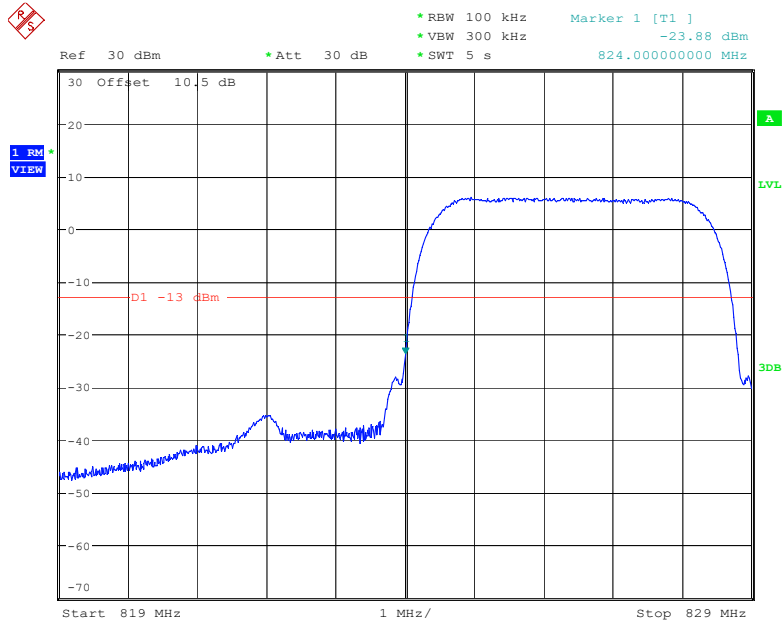
Date: 2.JUL.2022 10:00:39

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



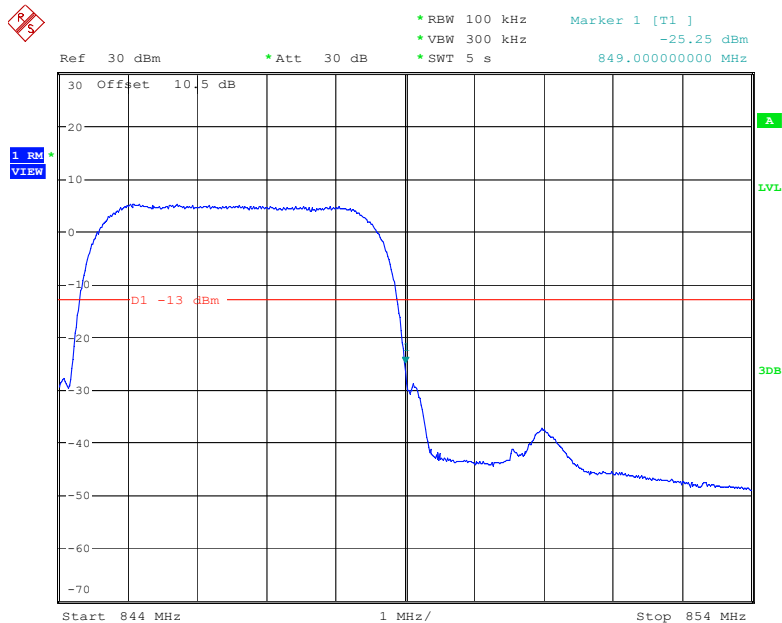
Date: 2.JUL.2022 10:06:17

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



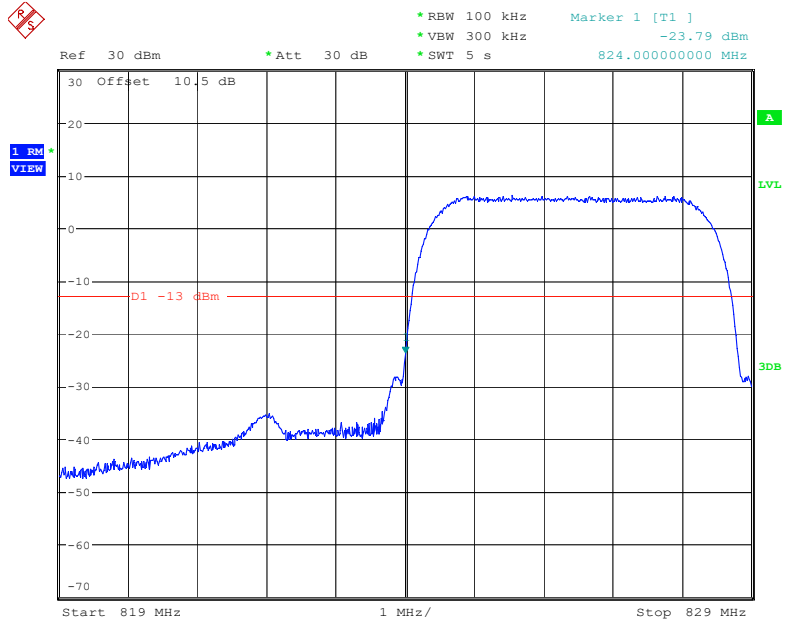
Date: 2.JUL.2022 10:25:47

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



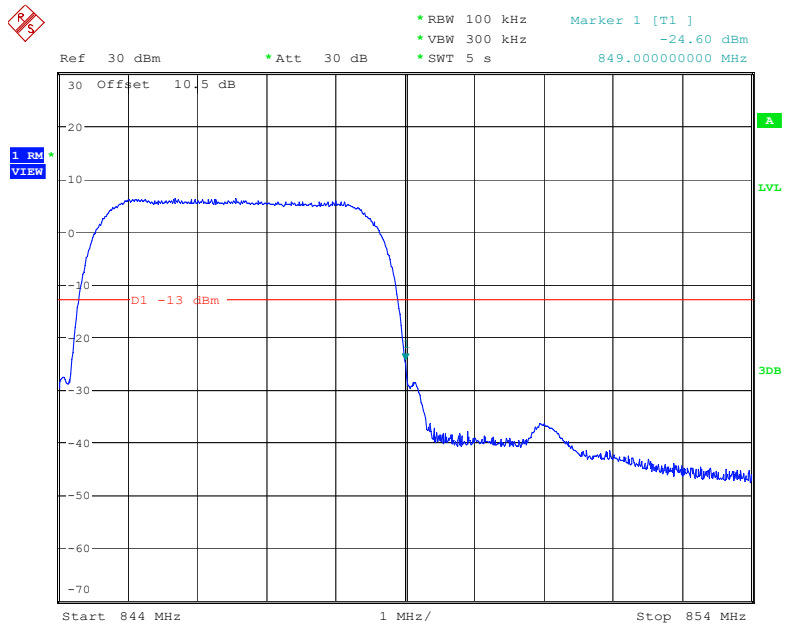
Date: 2.JUL.2022 10:39:43

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



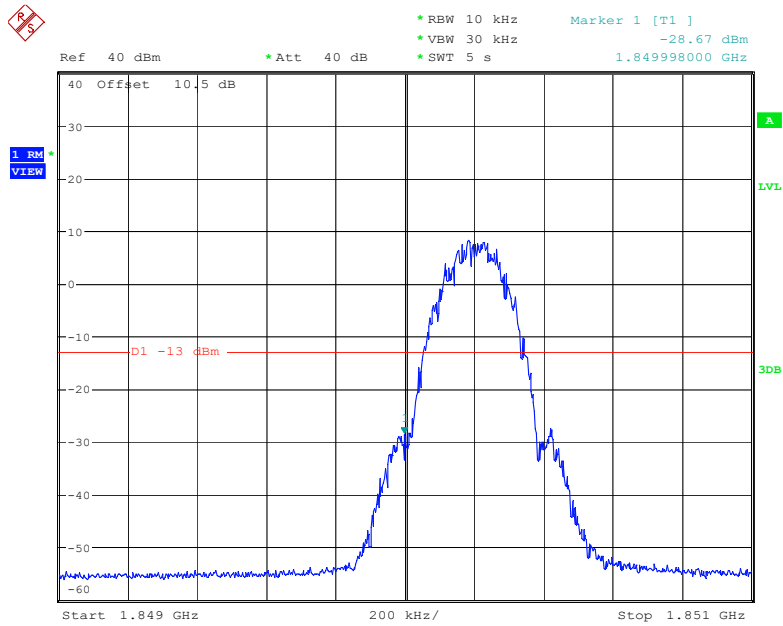
Date: 2.JUL.2022 10:12:41

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



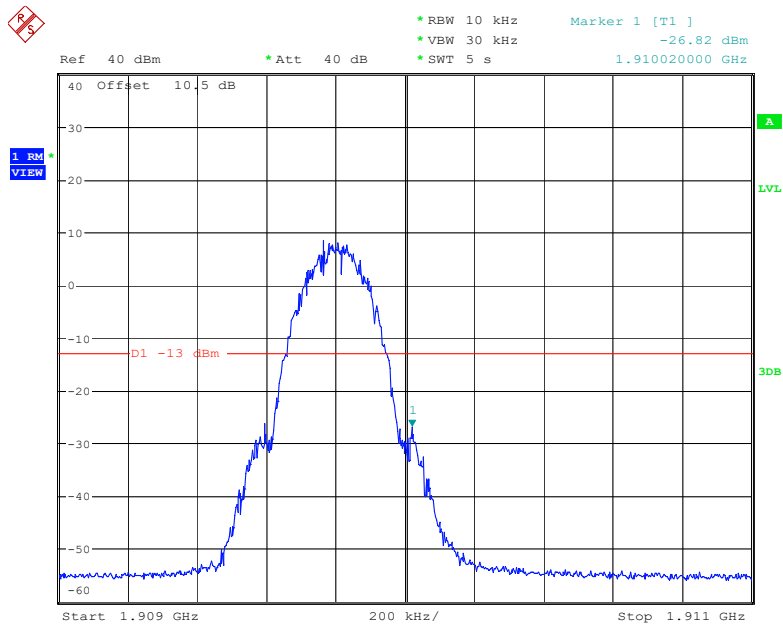
Date: 2.JUL.2022 10:19:02

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



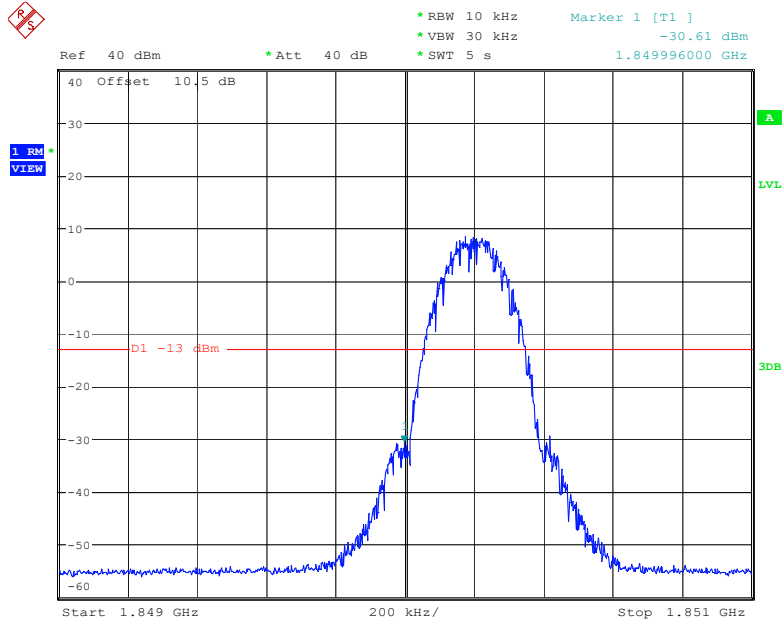
Date: 1.JUL.2022 16:54:21

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



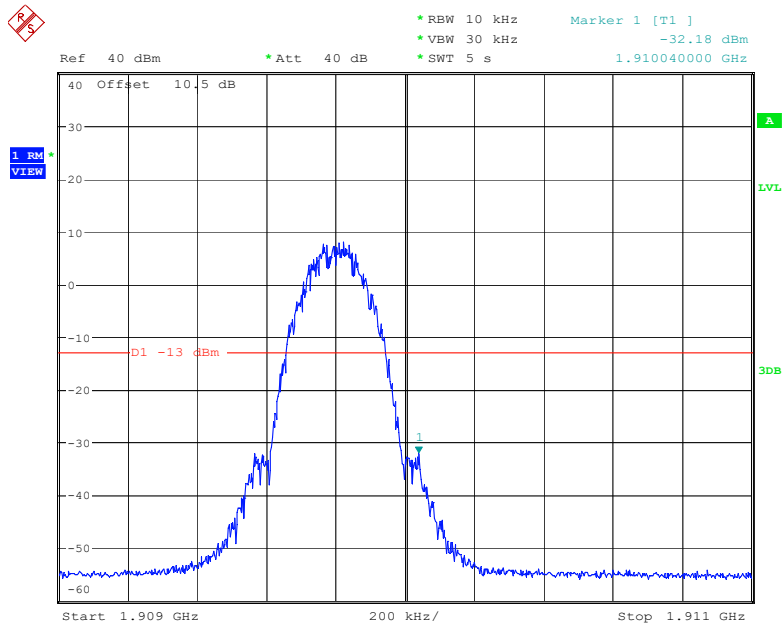
Date: 1.JUL.2022 17:01:59

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



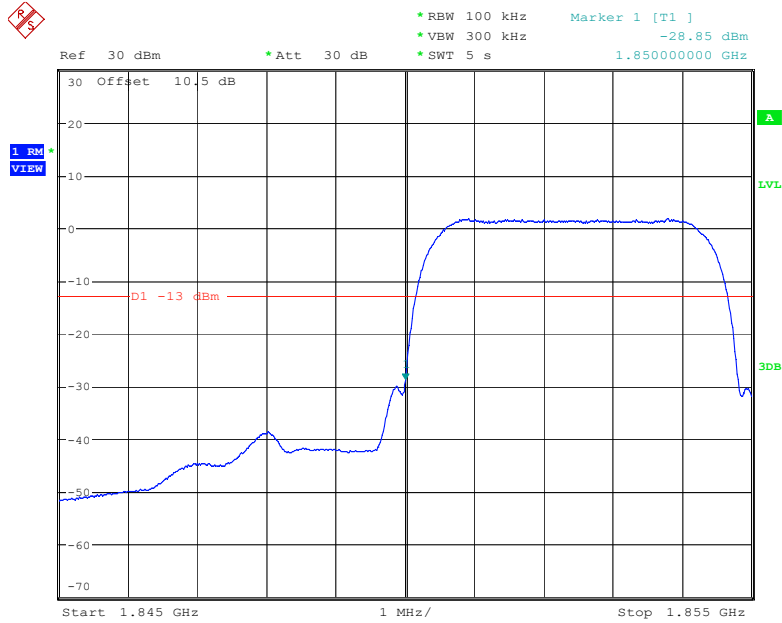
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PCS Band, Right Band Edge for EGPRS (8PSK) Mode



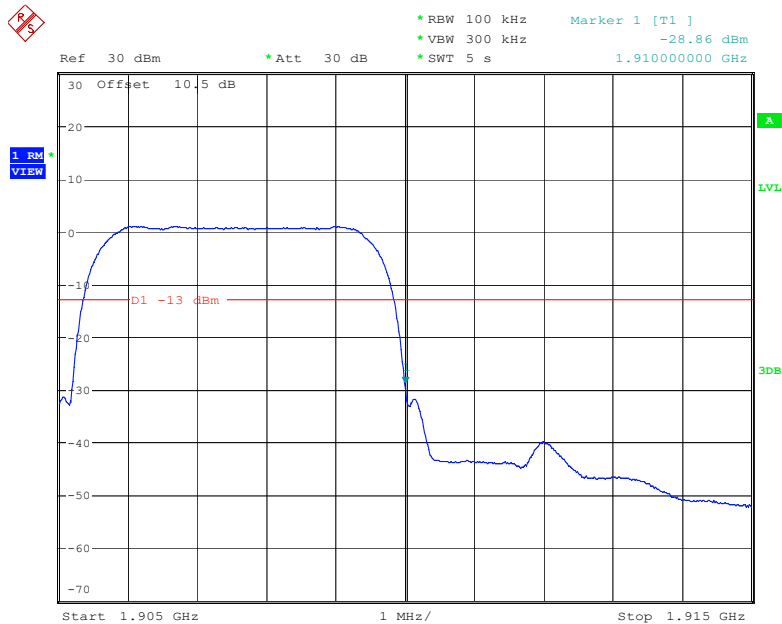
Date: 1.JUL.2022 16:49:15

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



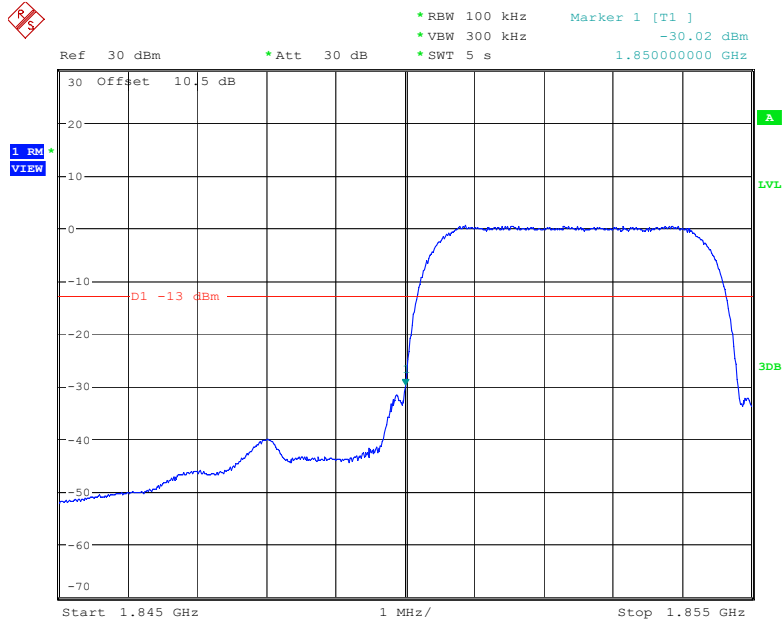
Date: 1.JUL.2022 17:08:24

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



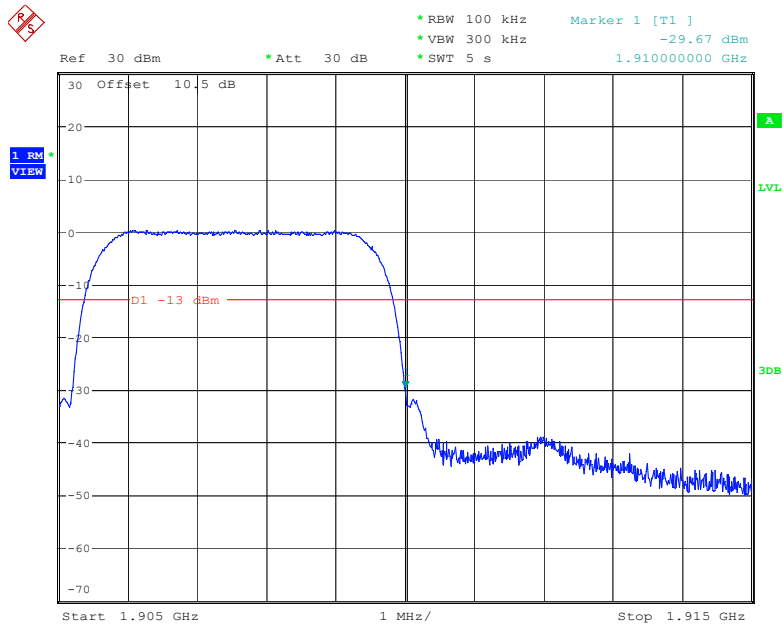
Date: 1.JUL.2022 17:38:14

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



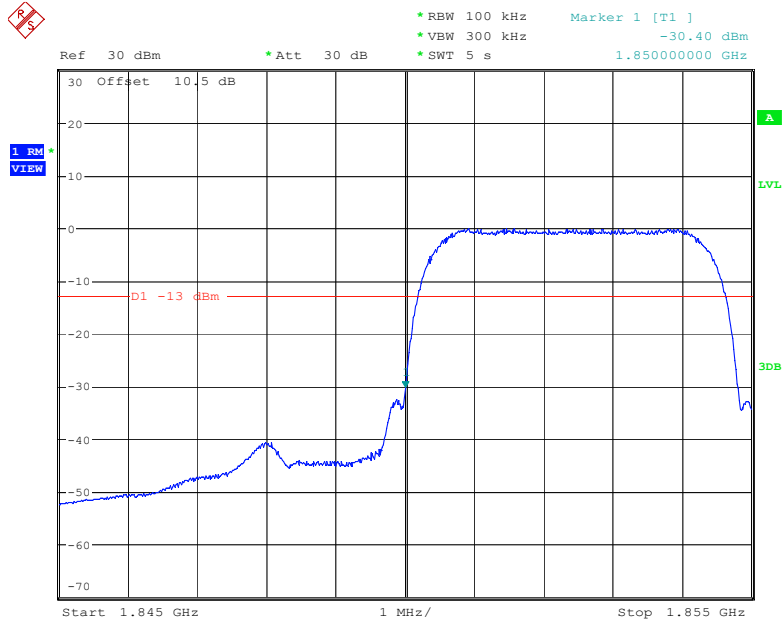
Date: 1.JUL.2022 18:08:24

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



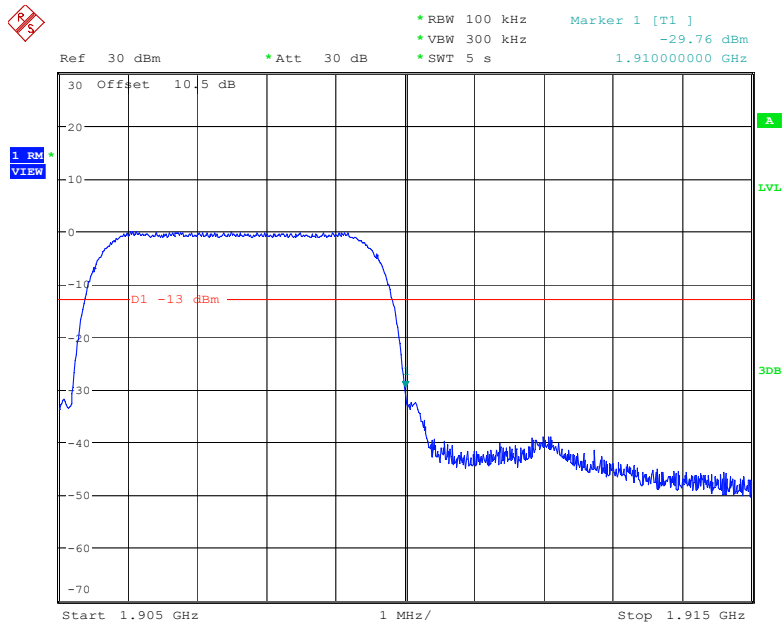
Date: 1.JUL.2022 18:18:19

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



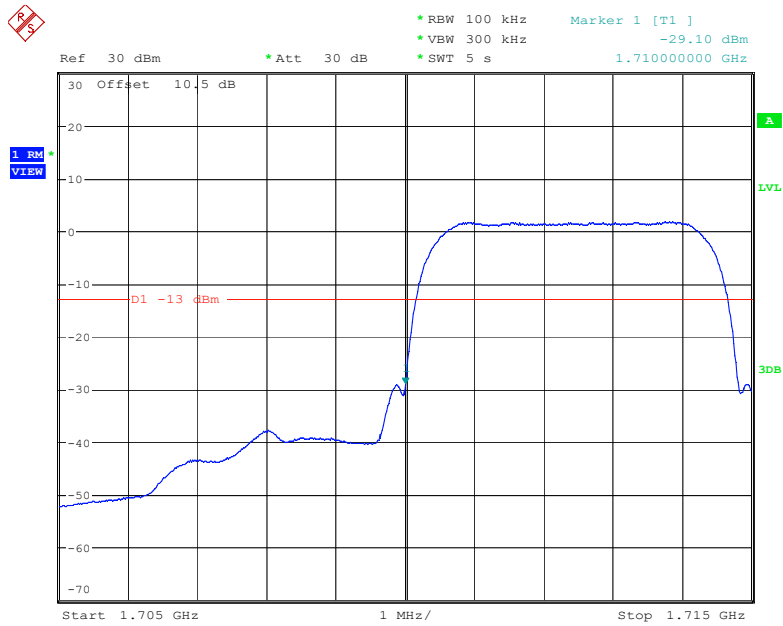
Date: 1.JUL.2022 18:22:51

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



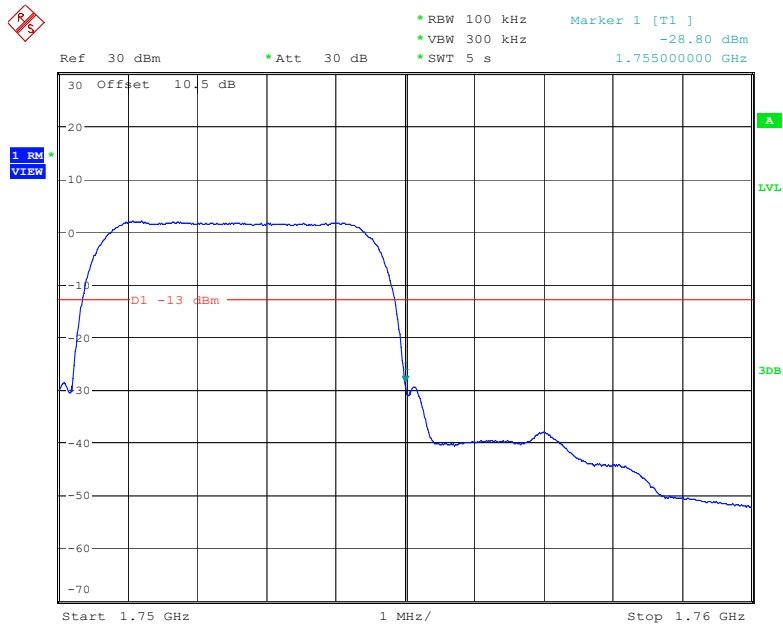
Date: 1.JUL.2022 18:32:58

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



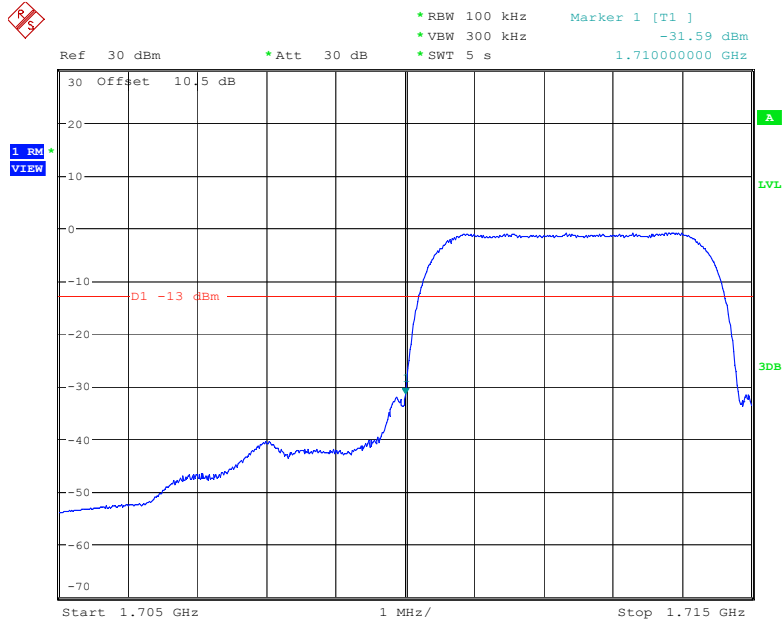
Date: 1.JUL.2022 18:38:08

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



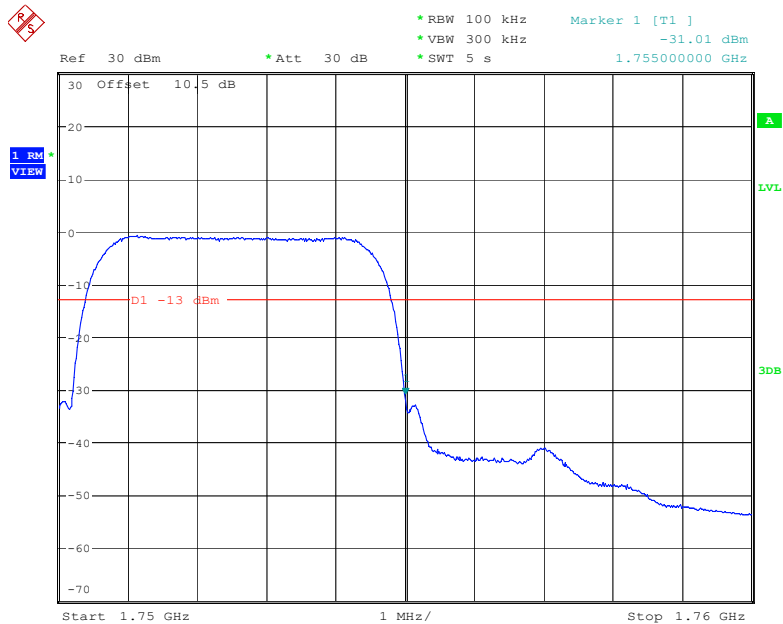
Date: 1.JUL.2022 18:45:04

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



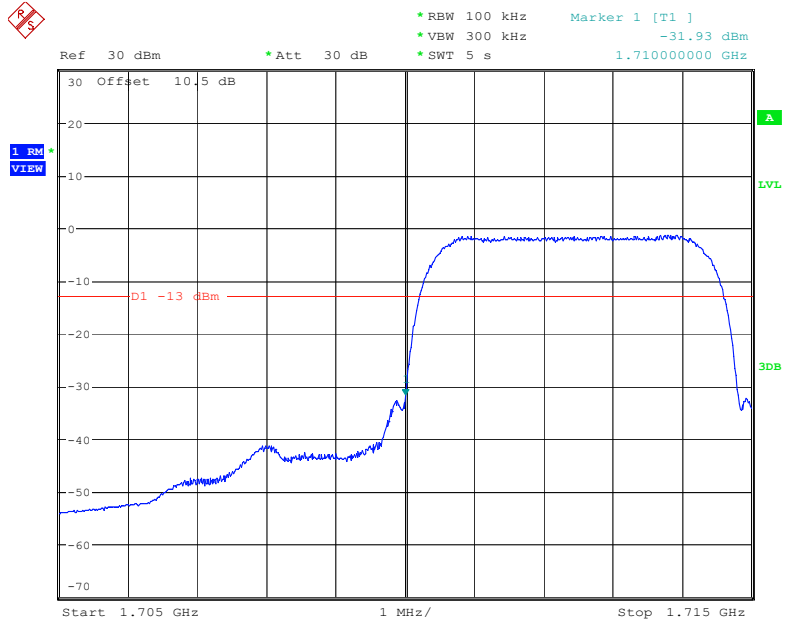
Date: 2.JUL.2022 09:35:59

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



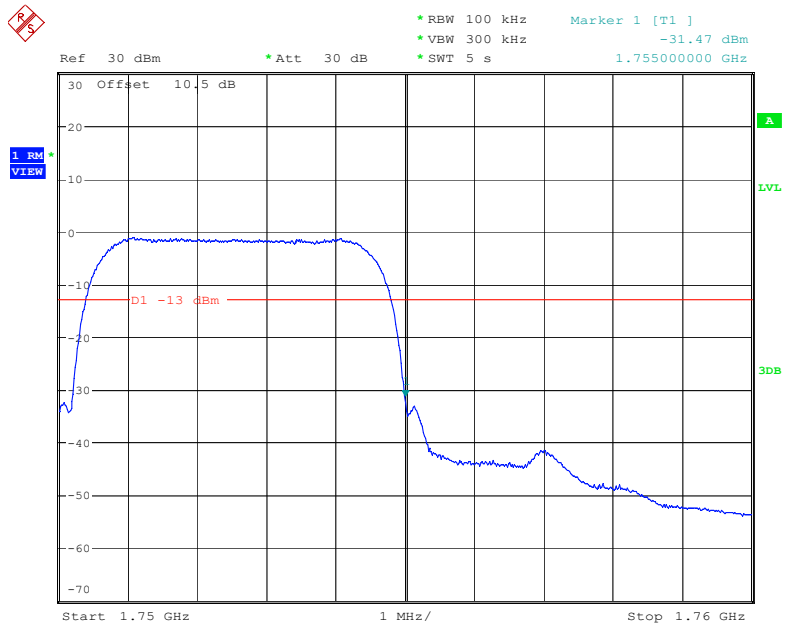
Date: 2.JUL.2022 09:43:06

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



Date: 2.JUL.2022 09:48:20

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



Date: 2.JUL.2022 09:55:26

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

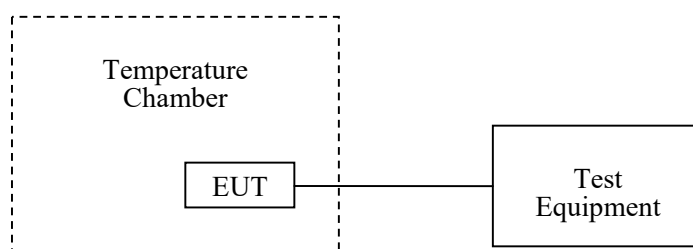
According to §24.235&§27.54, the frequency stability shall be sufficient to ensure that the fundamental emissions stays within the authorized frequency block.

Test Procedure

Frequency Stability vs. Temperature: The equipment under test was connected to an external AC 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 AC 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:	27.1~27.3°C
Relative Humidity:	56~56.8 %
ATM Pressure:	101.0 kPa

The testing was performed by Roger Ling from 2022-06-28 to 2022-07-02.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the following tables.

Cellular Band (Part 22H)**GSM 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	0.0012	2.5
-20		4	0.0048	2.5
-10		3	0.0036	2.5
0		2	0.0024	2.5
10		6	0.0072	2.5
20		-3	-0.0036	2.5
30		3	0.0036	2.5
40		4	0.0048	2.5
50		3	0.0036	2.5
20		L.V.	2	0.0024
	H.V.	5	0.0060	2.5

EDGE 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.	1.36	0.0016	2.5
-20		1.54	0.0018	2.5
-10		1.62	0.0019	2.5
0		1.45	0.0017	2.5
10		1.28	0.0015	2.5
20		1.60	0.0019	2.5
30		1.28	0.0015	2.5
40		1.55	0.0019	2.5
50		1.41	0.0017	2.5
20	L.V.	1.33	0.0016	2.5
	H.V.	1.26	0.0015	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.	1.11	0.0013	2.5
-20		1.25	0.0015	2.5
-10		1.31	0.0016	2.5
0		1.24	0.0015	2.5
10		1.41	0.0017	2.5
20		1.05	0.0013	2.5
30		1.22	0.0015	2.5
40		1.26	0.0015	2.5
50		1.54	0.0018	2.5
20	L.V.	1.39	0.0017	2.5
	H.V.	1.44	0.0017	2.5

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

Middle Channel, $f_0 = 1880.0$ MHz				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	N.V.	8	0.0043	Pass
-20		9	0.0048	Pass
-10		16	0.0085	Pass
0		14	0.0074	Pass
10		11	0.0059	Pass
20		25	0.0133	Pass
30		6	0.0032	Pass
40		10	0.0053	Pass
50		9	0.0048	Pass
20	L.V.	13	0.0069	Pass
	H.V.	11	0.0059	Pass

EDGE Mode

Middle Channel, $f_0 = 1880.0$ MHz				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	N.V.	3.48	0.0019	Pass
-20		3.35	0.0018	Pass
-10		3.41	0.0018	Pass
0		3.55	0.0019	Pass
10		3.69	0.0020	Pass
20		3.70	0.0020	Pass
30		3.56	0.0019	Pass
40		3.38	0.0018	Pass
50		3.55	0.0019	Pass
20	L.V.	3.34	0.0018	Pass
	H.V.	3.17	0.0017	Pass

WCDMA Mode

Middle Channel, $f_0=1880.0$ MHz				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	N.V.	1.49	0.0008	Pass
-20		1.55	0.0008	Pass
-10		1.34	0.0007	Pass
0		1.64	0.0009	Pass
10		1.28	0.0007	Pass
20		1.04	0.0006	Pass
30		1.26	0.0007	Pass
40		1.37	0.0007	Pass
50		1.42	0.0008	Pass
20		L.V.	1.36	0.0007
	H.V.	1.54	0.0008	Pass

AWS Band (Part 27)

Temperature (°C)	Power Supplied (V_{DC})	F_L (MHz)	F_H (MHz)	F_L Limit (MHz)	F_H Limit (MHz)
-30	N.V.	1710.0162	1754.9733	1710	1755
-20		1710.0158	1754.9722	1710	1755
-10		1710.0154	1754.9715	1710	1755
0		1710.0143	1754.9733	1710	1755
10		1710.0137	1754.9745	1710	1755
20		1710.0125	1754.9722	1710	1755
30		1710.0134	1754.9725	1710	1755
40		1710.0123	1754.9736	1710	1755
50		1710.0114	1754.9731	1710	1755
20		L.V.	1710.0135	1754.9724	1710
	H.V.	1710.0146	1754.9732	1710	1755

LTE (Worst case at maximum bandwidth)**QPSK:****Band 2:**

20.0 MHz Middle Channel, $f_0=1880\text{MHz}$				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	N.V.	-7.28	-0.0039	Pass
-20		-9.97	-0.0053	Pass
-10		-6.13	-0.0033	Pass
0		6.17	0.0033	Pass
10		7.92	0.0042	Pass
20		6.46	0.0034	Pass
30		-6.52	-0.0035	Pass
40		7.18	0.0038	Pass
50		-9.69	-0.0052	Pass
20		L.V.	-8.17	-0.0043
	H.V.	-7.05	-0.0038	Pass

Band 4:

20 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.	1710.0930	1754.9430	1710	1755
-20		1710.1006	1754.9060	1710	1755
-10		1710.0651	1754.8531	1710	1755
0		1710.0157	1754.8549	1710	1755
10		1710.0483	1754.8717	1710	1755
20		1710.0670	1754.9488	1710	1755
30		1710.0995	1754.8910	1710	1755
40		1710.0204	1754.8706	1710	1755
50		1710.0666	1754.8539	1710	1755
20		L.V.	1710.0337	1754.8975	1710
	H.V.	1710.0160	1754.8865	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)	Limit (ppm)
-30	N.V.	-4.28	-0.0051	2.5
-20		-6.97	-0.0083	2.5
-10		-5.50	-0.0066	2.5
0		6.06	0.0072	2.5
10		9.80	0.0117	2.5
20		5.03	0.006	2.5
30		-6.62	-0.0079	2.5
40		-8.73	-0.0104	2.5
50		-7.05	-0.0084	2.5
20		L.V.	8.99	0.0107
	H.V.	-7.17	-0.0086	2.5

Band 7:

20 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.	2500.0454	2569.7854	2500	2570
-20		2500.0948	2569.9481	2500	2570
-10		2500.0119	2569.8268	2500	2570
0		2500.0353	2569.9018	2500	2570
10		2500.0997	2569.9545	2500	2570
20		2500.0428	2569.8825	2500	2570
30		2500.0352	2569.8576	2500	2570
40		2500.0898	2569.9141	2500	2570
50		2500.0935	2569.8529	2500	2570
20		L.V.	2500.0982	2569.9195	2500
	H.V.	2500.0546	2569.8364	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.	699.0671	715.9565	699	716
-20		699.0380	715.9699	699	716
-10		699.0308	715.9925	699	716
0		699.0027	715.9536	699	716
10		699.0405	715.9490	699	716
20		699.0857	715.9360	699	716
30		699.0540	715.9633	699	716
40		699.0815	715.9791	699	716
50		699.0791	715.9754	699	716
20		L.V.	699.0834	715.9695	699
	H.V.	699.1278	715.9341	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.	777.0279	786.9404	777	787
-20		777.0343	786.9014	777	787
-10		777.0196	786.9880	777	787
0		777.0482	786.8363	777	787
10		777.0989	786.9822	777	787
20		777.3078	786.9147	777	787
30		777.0248	786.6013	777	787
40		777.0112	786.8897	777	787
50		777.0175	786.8731	777	787
20		L.V.	777.0418	786.9075	777
	H.V.	777.0289	786.8428	777	787

Band 17:

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.	704.0187	715.9491	704	716
-20		704.0406	715.9687	704	716
-10		704.0135	715.9486	704	716
0		704.0780	715.9099	704	716
10		704.0790	715.9632	704	716
20		704.0438	715.9796	704	716
30		704.0752	715.9213	704	716
40		704.0528	715.9056	704	716
50		704.0997	715.9163	704	716
20		L.V.	704.0418	715.9840	704
	H.V.	704.0659	715.9098	704	716

Band 38

20 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.	2570.0057	2619.9643	2570	2620
-20		2570.0288	2619.9700	2570	2620
-10		2570.0881	2619.9924	2570	2620
0		2570.1203	2619.8962	2570	2620
10		2570.0960	2619.9320	2570	2620
20		2570.0378	2619.9554	2570	2620
30		2570.0964	2619.9057	2570	2620
40		2570.0598	2619.9442	2570	2620
50		2570.0780	2619.9780	2570	2620
20		L.V.	2570.0546	2619.9774	2570
	H.V.	2570.0722	2619.9248	2570	2620

Band 41

20 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.	2535.0267	2654.9259	2535	2655
-20		2535.0802	2654.8024	2535	2655
-10		2535.0129	2654.9965	2535	2655
0		2535.0719	2654.9503	2535	2655
10		2535.0125	2654.8196	2535	2655
20		2535.0252	2654.7609	2535	2655
30		2535.0964	2654.8892	2535	2655
40		2535.0250	2654.8651	2535	2655
50		2535.0431	2654.6230	2535	2655
20		L.V.	2535.0848	2654.8843	2535
	H.V.	2535.0567	2654.9414	2535	2655

Band 66

20 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.	1710.1977	1779.7317	1710	1780
-20		1710.0782	1779.8542	1710	1780
-10		1710.3694	1779.8981	1710	1780
0		1710.2169	1779.7708	1710	1780
10		1710.0747	1779.8544	1710	1780
20		1710.0281	1779.9492	1710	1780
30		1710.4542	1779.8734	1710	1780
40		1710.4190	1779.8285	1710	1780
50		1710.0261	1779.8304	1710	1780
20		L.V.	1710.0757	1779.9602	1710
	H.V.	1710.2123	1779.8813	1710	1780

16QAM:**Band 2:**

20.0 MHz Middle Channel, $f_0=1880\text{MHz}$				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	N.V.	-5.82	-0.0031	Pass
-20		-6.68	-0.0036	Pass
-10		9.77	0.0052	Pass
0		-7.62	-0.0041	Pass
10		-9.91	-0.0053	Pass
20		-9.82	-0.0052	Pass
30		-6.68	-0.0036	Pass
40		-8.85	-0.0047	Pass
50		5.67	0.003	Pass
20		L.V.	6.05	0.0032
	H.V.	7.52	0.004	Pass

Band 4:

20 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.	1710.0685	1754.9385	1710	1755
-20		1710.0818	1754.8904	1710	1755
-10		1710.0887	1754.8885	1710	1755
0		1710.0531	1754.9021	1710	1755
10		1710.0492	1754.8427	1710	1755
20		1710.0489	1754.9488	1710	1755
30		1710.0375	1754.9009	1710	1755
40		1710.0924	1754.9117	1710	1755
50		1710.0418	1754.8635	1710	1755
20		L.V.	1710.0240	1754.9137	1710
	H.V.	1710.0481	1754.9259	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)	Limit (ppm)
-30	N.V.	-6.94	-0.0083	2.5
-20		8.10	0.0097	2.5
-10		-8.59	-0.0103	2.5
0		9.33	0.0112	2.5
10		-6.94	-0.0083	2.5
20		7.54	0.009	2.5
30		6.43	0.0077	2.5
40		-6.17	-0.0074	2.5
50		-6.44	-0.0077	2.5
20		L.V.	6.34	0.0076
	H.V.	-6.89	-0.0082	2.5

Band 7:

20 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.	2500.0103	2569.8391	2500	2570
-20		2500.0678	2569.9385	2500	2570
-10		2500.0806	2569.8294	2500	2570
0		2500.0596	2569.9676	2500	2570
10		2500.0840	2569.9108	2500	2570
20		2500.0008	2569.8752	2500	2570
30		2500.0189	2569.9071	2500	2570
40		2500.0769	2569.9232	2500	2570
50		2500.0551	2569.9093	2500	2570
20		L.V.	2500.0820	2569.9567	2500
	H.V.	2500.0541	2569.8307	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.	699.1083	715.9616	699	716
-20		699.0440	715.9990	699	716
-10		699.0406	715.9756	699	716
0		699.0248	715.9066	699	716
10		699.0316	715.9515	699	716
20		699.0605	715.9711	699	716
30		699.0883	715.9572	699	716
40		699.0264	715.8907	699	716
50		699.0721	715.9464	699	716
20		L.V.	699.0558	715.9560	699
	H.V.	699.0021	715.9355	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.	777.0453	786.0603	777	787
-20		777.3284	786.0175	777	787
-10		777.3884	786.0554	777	787
0		777.1568	786.4972	777	787
10		777.2101	786.0439	777	787
20		777.4657	786.0422	777	787
30		777.3078	786.0567	777	787
40		777.1858	786.0294	777	787
50		777.3177	786.0919	777	787
20		L.V.	777.0935	786.1230	777
	H.V.	777.3933	786.0183	777	787

Band 17:

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.	704.0462	715.9280	704	716
-20		704.0666	715.9285	704	716
-10		704.0596	715.9479	704	716
0		704.0714	715.8856	704	716
10		704.0427	715.9836	704	716
20		704.0536	715.9736	704	716
30		704.0648	715.9370	704	716
40		704.0462	715.8906	704	716
50		704.0222	715.9084	704	716
20		L.V.	704.0522	715.9274	704
	H.V.	704.0647	715.9511	704	716

Band 38

20 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.	2570.0163	2619.9551	2570	2620
-20		2570.0532	2619.9533	2570	2620
-10		2570.0426	2619.9731	2570	2620
0		2570.0600	2619.9266	2570	2620
10		2570.0867	2619.9272	2570	2620
20		2570.0367	2619.9761	2570	2620
30		2570.0857	2619.9273	2570	2620
40		2570.0507	2619.9103	2570	2620
50		2570.0374	2619.9496	2570	2620
20		L.V.	2570.0664	2619.9303	2570
	H.V.	2570.0528	2619.9525	2570	2620

Band 41

20 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.	2535.0286	2654.9683	2535	2655
-20		2535.0822	2654.8392	2535	2655
-10		2535.0135	2654.8849	2535	2655
0		2535.0648	2654.9880	2535	2655
10		2535.0226	2654.8545	2535	2655
20		2535.0302	2654.7426	2535	2655
30		2535.1138	2654.8905	2535	2655
40		2535.0396	2654.8831	2535	2655
50		2535.0465	2654.6267	2535	2655
20		L.V.	2535.0919	2654.9078	2535
	H.V.	2535.0408	2654.9779	2535	2655

Band 66

20 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.	1710.1871	1779.0298	1710	1780
-20		1710.0262	1779.0393	1710	1780
-10		1710.3567	1779.0477	1710	1780
0		1710.2037	1779.0378	1710	1780
10		1710.0927	1779.0974	1710	1780
20		1710.0385	1779.0716	1710	1780
30		1710.4550	1779.5719	1710	1780
40		1710.4014	1779.0235	1710	1780
50		1710.2918	1779.0937	1710	1780
20		L.V.	1710.0354	1779.4546	1710
	H.V.	1710.2390	1779.0831	1710	1780

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