

FCC PART 27
FCC PART 22H, PART 24E
TEST REPORT

For

INFINIX MOBILITY LIMITED

FLAT 39 8/F BLOCK D WAH LOK INDUSTRIAL CENTRE 31-35 SHAN MEI STREET
FOTAN NT Hong Kong

FCC ID: 2AIZN-X6511C

Report Type: Original Report	Product Type: Mobile Phone
Report Number: SZ1210806-33125E-RF-00A	
Report Date: 2021-09-09	
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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	Mobile Phone
Tested Model	X6511C
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 38: 2570-2620MHz(TX/RX) LTE Band 41: 2535-2655MHz(TX/RX)
Modulation Technique	2G: GMSK, 8PSK 3G: BPSK, QPSK, 16QAM 4G: QPSK, 16QAM
Antenna Specification*	EGSM850/WCDMA Band 5/LTE Band 5: -2.9dBi PCS1900/WCDMA Band 2/ LTE Band 2: -0.9dBi WCDMA Band 4/ LTE Band 4: -2.4dBi LTE Band 7/ Band 38/ Band 41: -0.1dBi (provided by the applicant)
Voltage Range	DC 3.85V from battery or DC 5V from adapter
Date of Test	2021-08-13 to 2021-09-09
Sample number	SZ1210806-33125E-RF -S1(Assigned by BACL, Shenzhen)
Received date	2021-08-06
Sample/EUT Status	Good condition
Normal/Extreme Condition	L.V.: Low Voltage 3.45V _{DC} N.V.: Normal Voltage 3.85V _{DC} H.V.: High Voltage 4.4V _{DC} The extreme condition was declared by the applicant
Adapter information	Model: U100XSA Input: 100-240V, 50/60Hz, 0.3A Output: 5.0V 2.0A

Objective

This test report is in accordance with Part 2-Subpart J, Part 22-Subpart H and Part 24-Subpart E and Subpart 27 of the Federal Communication Commissions 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 Bay Area Compliance Laboratories Corp. (Shenzhen). 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
Emissions, Radiated	Below 1GHz	±4.75dB
	Above 1GHz	±4.88dB
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 Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West) ,6F,7F,the 3rd Phase of Wan Li Industrial Building D,Shihua Rd, FuTian Free Trade Zone, Shenzhen, 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.: 342867, the FCC Designation No.: CN1221.

The test site has been registered with ISED Canada under ISED Canada Registration Number 3062B.

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
EGSM850	0.25	824.2	836.6	848.8
DCS1900	0.25	1850.2	1880	1909.8
WCDMA B2	4.2	1852.4	1880	1907.6
WCDMA B4	4.2	1712.4	1732.6	1752.6
WCDMA B5	4.2	826.4	836.6	846.6
LTE B2	1.4	1850.7	1880	1909.3
	3	1851.5	1880	1908.5
	5	1852.5	1880	1907.5
	10	1855	1880	1905
	15	1857.5	1880	1902.5
	20	1860	1880	1900
LTE B4	1.4	1710.7	1732.5	1754.3
	3	1711.5	1732.5	1753.5
	5	1712.5	1732.5	1752.5
	10	1715	1732.5	1750
	15	1717.5	1732.5	1747.5
	20	1720	1732.5	1745
LTE B5	1.4	824.7	836.5	848.3
	3	825.5	836.5	847.5
	5	826.5	836.5	846.5
	10	829	836.5	844
LTE B7	5	2502.5	2535	2567.5
	10	2505	2535	2565
	15	2507.5	2535	2562.5
	20	2510	2535	2560
LTE 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

Equipment Modifications

No modification was made to the EUT.

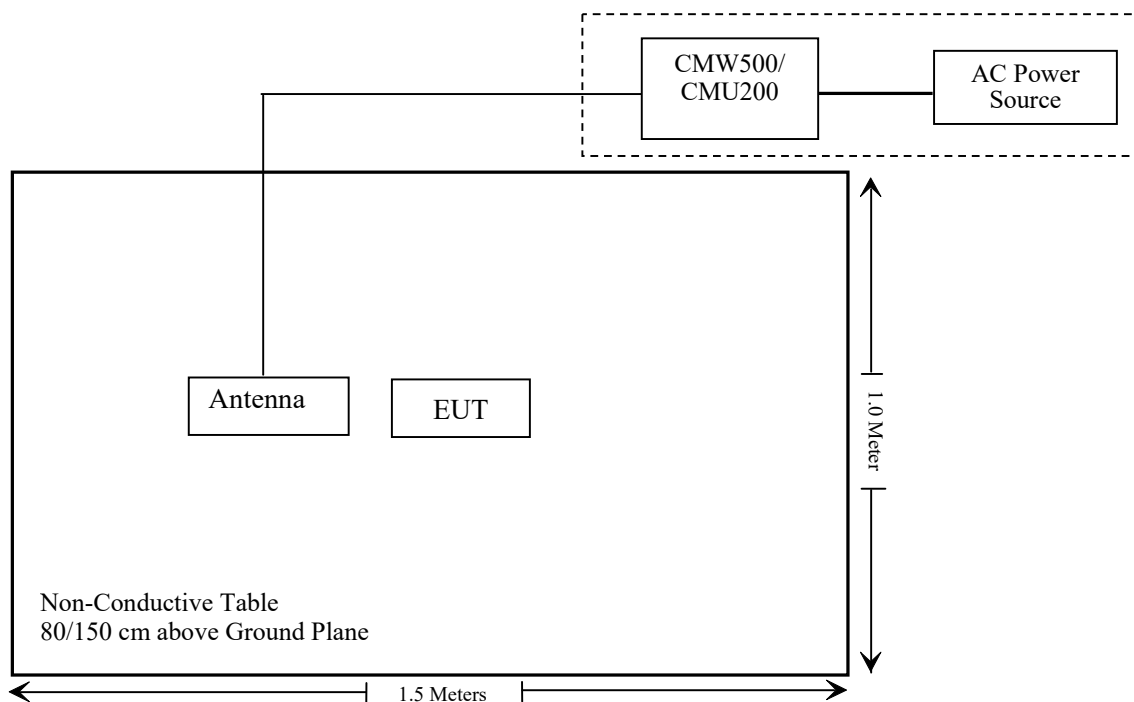
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	1201.002K50-116218-U
Rohde & Schwarz	Universal Radio Communication Tester	CMU200	115500

Support Cable Description

Cable Description	Length (m)	From / Port	To
Un-shielded Un-detachable AC cable	1.2	AC Power	CMW500/ CMU200

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

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

Note: * Please refer to SAR report released by BACL, report number: SZ1210806-33125E-SA.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test					
R&S	EMI Test Receiver	ESR3	102455	2021/07/06	2022/07/05
Sonoma instrument	Pre-amplifier	310 N	186238	2021/08/04	2022/08/03
Sunol Sciences	Broadband Antenna	JB1	A040904-2	2020/12/22	2023/12/21
COM-POWER	Dipole Antenna	AD-100	721027	NCR	NCR
Unknown	Cable 2	RF Cable 2	F-03-EM197	2020/11/29	2021/11/28
Unknown	Cable	Chamber Cable 4	EC-007	2020/11/29	2021/11/28
Rohde & Schwarz	Spectrum Analyzer	FSV40-N	102259	2020/11/29	2021/11/28
COM-POWER	Pre-amplifier	PA-122	181919	2021/07/06	2022/07/05
Quinstar	Amplifier	QLW-18405536-J0	15964001002	2020/11/29	2021/11/28
Sunol Sciences	Horn Antenna	3115	9107-3694	2020/11/28	2021/11/27
A.H.System	Horn Antenna	SAS-200/571	135	2021/01/15	2024/01/14
Insulted Wire Inc.	RF Cable	SPS-2503-3150	02222010	2018/09/01	2021/08/31
Unknown	RF Cable	W1101-EQ1 OUT	F-19-EM005	2020/11/29	2021/11/28
Unknown	Signal Cable	RG-214	2	2020/11/29	2021/11/28
MICRO-TRONICS	Passband filter	HPM50111	F-19-EM006	2021/04/20	2022/04/20
Unknown	High Pass filter	1.3GHz	101120	2021/04/20	2022/04/20
the electro-Mechanics Co	Horn Antenna	3116	9510-2270	2019/10/13	2022/10/12
the electro-Mechanics Co	Horn Antenna	3116	2026	2019/10/13	2022/10/12
Agilent	Signal Generator	N5183A	MY51040755	2020/12/29	2021/12/28

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
Rohde & Schwarz	SPECTRUM ANALYZER	FSU26	200120	2021/04/02	2022/04/01
Rohde & Schwarz	Signal and Spectrum Analyzer	FSV40	101473	2021/07/06	2022/07/05
Unknown	RF Cable	Unknown	0501 067	2020/11/29	2021/11/28
Weinschel	Power divider	1515	RH386	2021/04/20	2022/04/20
ESPEC	Temperature & Humidity Chamber	EL-10KA	9107726	2021/02/23	2022/02/22
Rohde & Schwarz	Universal Radio Communication Tester	CMU200	115500	2021/07/06	2022/07/05
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	1201.002K50-146520-wh	2021/07/06	2022/07/05
instek	DC Power Supply	GPS-3030DD	EM832096	NCR	NCR
Fluke	Digital Multimeter	287	19000011	2021/02/22	2022/02/21

* Statement of Traceability: Bay Area Compliance Laboratories Corp. (Shenzhen) 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

Compliance, please refer to the SAR report: SZ1210806-33125E-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 (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.

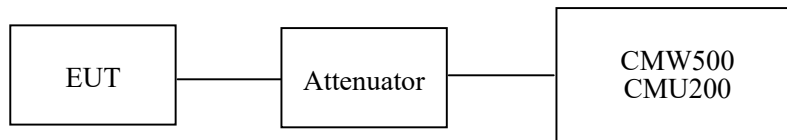
According to §27.50(d), the maximum EIRP must not exceed 1Watts (30dBm) for 1710-1780MHz.

According to §27.50(h), the maximum EIRP must not exceed 2Watts (33dBm) for 2500-2570MHz & 2496-2690MHz.

Test Procedure

Conducted method:

The RF output of the transmitter was connected to the CMW500/CMU200 through sufficient attenuation.



Test Data

Environmental Conditions

Temperature:	25.2~ 29.2 °C
Relative Humidity:	51~58 %
ATM Pressure:	101.0 kPa

The testing was performed by Cala Liu on 2021-08-20 and Key Pei on 2021-08-17.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the following tables and plots.

Conducted Power**Cellular Band 850**

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	ERP(dBm)	Limit (dBm)
GSM	128	824.2	32.55	27.50	38.45
	190	836.6	32.49	27.44	38.45
	251	848.8	32.56	27.51	38.45

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)				ERP(dBm)				Limit (dBm)
			1 slot	2 slots	3 slots	4 slots	1 slot	2 slots	3 slots	4 slots	
GPRS	128	824.2	32.47	31.45	30.43	29.24	27.42	26.40	25.38	24.19	38.45
	190	836.6	32.49	31.44	30.47	29.21	27.44	26.39	25.42	24.16	38.45
	251	848.8	32.36	31.39	30.32	29.12	27.31	26.34	25.27	24.07	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	27.79	26.65	24.18	22.78	22.74	21.60	19.13	17.73	38.45
	190	836.6	27.73	26.64	24.15	22.69	22.68	21.59	19.1	17.64	38.45
	251	848.8	27.70	26.49	24.12	22.90	22.65	21.44	19.07	17.85	38.45

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 5)	RMC12.2k		22.91	23.00	22.88	17.86	17.95	17.83
	HSDPA	1	20.01	19.97	20.12	14.96	14.92	15.07
		2	20.08	20.03	20.17	15.03	14.98	15.12
		3	20.05	20.04	20.16	15	14.99	15.11
		4	20.11	20.11	20.19	15.06	15.06	15.14
	HSUPA	1	21.34	21.26	21.28	16.29	16.21	16.23
		2	21.33	21.24	21.29	16.28	16.19	16.24
		3	21.35	21.27	21.33	16.3	16.22	16.28
		4	21.35	21.28	21.34	16.3	16.23	16.29
		5	21.37	21.35	21.4	16.32	16.3	16.35
	HSPA+	1	21.40	21.40	21.46	16.35	16.35	16.41

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

Antenna Gain = -2.9dBi = -5.05dBd (0dBd=2.15dBi)

Limit: ERP≤38.45dBm

PCS Band 1900

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	EIRP(dBm)	Limit (dBm)
GSM	512	1850.2	29.0	28.1	33
	661	1880.0	29.5	28.6	33
	810	1909.8	29.2	28.3	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	29.29	29.24	29.03	28.87	28.39	28.34	28.13	27.97	33
	661	1880.0	29.24	29.17	29.09	28.87	28.34	28.27	28.19	27.97	33
	810	1909.8	29.40	29.35	29.17	29.03	28.5	28.45	28.27	28.13	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	28.70	27.72	26.69	25.23	27.8	26.82	25.79	24.33	33
	661	1880.0	28.74	27.63	26.73	25.27	27.84	26.73	25.83	24.37	33
	810	1909.8	28.87	27.82	26.87	25.33	27.97	26.92	25.97	24.43	33

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 2)	RMC12.2k		15.84	14.96	16.07	14.94	14.06	15.17
	HSDPA	1	14.65	14.78	14.1	13.75	13.88	13.2
		2	14.72	14.83	14.17	13.82	13.93	13.27
		3	14.71	14.79	14.16	13.81	13.89	13.26
		4	14.75	14.81	14.2	13.85	13.91	13.3
	HSUPA	1	14.11	14.32	14.56	13.21	13.42	13.66
		2	14.12	14.30	14.57	13.22	13.4	13.67
		3	14.17	14.34	14.62	13.27	13.44	13.72
		4	14.16	14.32	14.61	13.26	13.42	13.71
		5	14.18	14.37	14.63	13.28	13.47	13.73
	HSPA+	1	14.23	14.40	14.68	13.33	13.5	13.78

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

Antenna Gain = -0.9dBi

Limit: EIRP ≤ 33dBm

AWS Band 4

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 4)	RMC12.2k		16.12	15.94	15.81	13.72	13.54	13.41
	HSDPA	1	14.88	14.82	14.83	12.48	12.42	12.43
		2	14.95	14.86	14.89	12.55	12.46	12.49
		3	14.91	14.85	14.91	12.51	12.45	12.51
		4	14.95	14.90	14.96	12.55	12.5	12.56
	HSUPA	1	14.46	14.28	14.41	12.06	11.88	12.01
		2	14.53	14.34	14.42	12.13	11.94	12.02
		3	14.51	14.34	14.43	12.11	11.94	12.03
		4	14.57	14.39	14.47	12.17	11.99	12.07
		5	14.61	14.42	14.54	12.21	12.02	12.14
	HSPA+	1	14.53	14.34	14.42	12.13	11.94	12.02

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

Antenna Gain = -2.4dBi

Limit: EIRP ≤ 30dBm

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

Mode	Channel	PAR (dB)	Limit (dB)
GSM	Low	3.33	13
	Middle	3.35	13
	High	3.38	13
EGPRS	Low	3.69	13
	Middle	3.28	13
	High	3.57	13

Mode	Channel	PAR (dB)	Limit (dB)
RMC (BPSK)	Low	3.35	13
	Middle	3.37	13
	High	3.34	13
HSDPA (16QAM)	Low	3.48	13
	Middle	3.42	13
	High	3.44	13
HSUPA (BPSK)	Low	3.55	13
	Middle	3.56	13
	High	3.30	13
HSUPA+	Low	3.38	13
	Middle	3.40	13
	High	3.40	13

PCS Band

Mode	Channel	PAR (dB)	Limit (dB)
GSM	Low	3.28	13
	Middle	3.30	13
	High	3.32	13
EGPRS	Low	3.81	13
	Middle	3.64	13
	High	3.72	13

Mode	Channel	PAR (dB)	Limit (dB)
RMC (BPSK)	Low	3.40	13
	Middle	3.52	13
	High	3.67	13
HSDPA (16QAM)	Low	3.53	13
	Middle	3.48	13
	High	3.41	13
HSUPA (BPSK)	Low	3.4	13
	Middle	3.55	13
	High	3.53	13
HSUPA+	Low	3.52	13
	Middle	3.50	13
	High	3.47	13

AWS Band

Mode	Channel	PAR (dB)	Limit (dB)
WCDMA (BPSK)	Low	3.37	13
	Middle	3.44	13
	High	3.46	13
HSDPA (16QAM)	Low	3.48	13
	Middle	3.42	13
	High	3.42	13
HSUPA (BPSK)	Low	3.43	13
	Middle	3.43	13
	High	3.45	13
HSUPA+	Low	3.47	13
	Middle	3.52	13
	High	3.43	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	16.76	16.79	16.94	15.86	15.89	16.04
		RB1#3	16.88	16.98	17.12	15.98	16.08	16.22
		RB1#5	16.70	16.77	16.92	15.8	15.87	16.02
		RB3#0	16.80	16.89	17.11	15.9	15.99	16.21
		RB3#3	16.80	16.86	17.06	15.9	15.96	16.16
		RB6#0	15.80	15.86	16.01	14.9	14.96	15.11
	16QAM	RB1#0	15.97	16.11	16.16	15.07	15.21	15.26
		RB1#3	15.78	15.93	16.00	14.88	15.03	15.1
		RB1#5	16.01	15.93	16.19	15.11	15.03	15.29
		RB3#0	16.03	15.90	16.15	15.13	15	15.25
		RB3#3	14.83	14.90	14.96	13.93	14	14.06
		RB6#0	16.76	16.79	16.94	15.86	15.89	16.04
3.0	QPSK	RB1#0	16.79	16.85	16.94	15.89	15.95	16.04
		RB1#8	16.72	16.82	16.99	15.82	15.92	16.09
		RB1#14	16.67	16.80	16.97	15.77	15.9	16.07
		RB6#0	15.75	15.80	15.93	14.85	14.9	15.03
		RB6#9	15.69	15.75	15.95	14.79	14.85	15.05
		RB15#0	15.74	15.82	16.00	14.84	14.92	15.1
	16QAM	RB1#0	16.38	15.98	16.01	15.48	15.08	15.11
		RB1#8	16.29	15.94	16.02	15.39	15.04	15.12
		RB1#14	14.84	14.85	14.88	13.94	13.95	13.98
		RB6#0	14.77	14.82	14.91	13.87	13.92	14.01
		RB6#9	14.81	14.81	15.05	13.91	13.91	14.15
		RB15#0	16.79	16.85	16.94	15.89	15.95	16.04

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	16.69	16.77	16.9	15.79	15.87	16
		RB1#13	16.80	16.87	17.0	15.9	15.97	16.1
		RB1#24	16.63	16.77	16.9	15.73	15.87	16
		RB15#0	15.74	15.87	16.1	14.84	14.97	15.2
		RB15#10	15.77	15.86	16.0	14.87	14.96	15.1
		RB25#0	15.73	15.85	16.0	14.83	14.95	15.1
	16QAM	RB1#0	15.69	16.19	16.1	14.79	15.29	15.2
		RB1#13	15.57	16.04	16.0	14.67	15.14	15.1
		RB1#24	14.78	14.81	15.1	13.88	13.91	14.2
		RB15#0	14.81	14.85	15.1	13.91	13.95	14.2
		RB15#10	14.81	14.87	15.0	13.91	13.97	14.1
		RB25#0	16.69	16.77	16.9	15.79	15.87	16
10.0	QPSK	RB1#0	16.75	16.84	16.97	15.85	15.94	16.07
		RB1#25	16.89	17.02	17.15	15.99	16.12	16.25
		RB1#49	16.77	16.86	16.97	15.87	15.96	16.07
		RB25#0	15.80	15.90	16.14	14.9	15	15.24
		RB25#25	15.80	15.91	16.03	14.9	15.01	15.13
		RB50#0	15.80	15.94	16.07	14.9	15.04	15.17
	16QAM	RB1#0	16.51	16.20	16.13	15.61	15.3	15.23
		RB1#25	16.34	15.98	15.98	15.44	15.08	15.08
		RB1#49	14.88	14.94	15.22	13.98	14.04	14.32
		RB25#0	14.85	14.94	15.10	13.95	14.04	14.2
		RB25#25	14.82	14.96	15.01	13.92	14.06	14.11
		RB50#0	16.75	16.84	16.97	15.85	15.94	16.07

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	16.58	16.63	16.73	15.68	15.73	15.83
		RB1#38	16.65	16.72	16.86	15.75	15.82	15.96
		RB1#74	16.61	16.69	16.83	15.71	15.79	15.93
		RB36#0	15.68	15.82	15.95	14.78	14.92	15.05
		RB36#39	15.70	15.84	15.90	14.8	14.94	15
		RB75#0	15.72	15.80	15.91	14.82	14.9	15.01
	16QAM	RB1#0	16.33	15.93	16.31	15.43	15.03	15.41
		RB1#38	16.21	15.84	16.24	15.31	14.94	15.34
		RB1#74	14.69	14.84	14.95	13.79	13.94	14.05
		RB36#0	14.70	14.83	14.85	13.8	13.93	13.95
		RB36#39	14.71	14.79	14.94	13.81	13.89	14.04
		RB75#0	16.58	16.63	16.73	15.68	15.73	15.83
20.0	QPSK	RB1#0	16.49	16.57	16.53	15.59	15.67	15.63
		RB1#50	16.85	16.95	17.01	15.95	16.05	16.11
		RB1#99	16.49	16.59	16.66	15.59	15.69	15.76
		RB50#0	15.71	15.81	15.98	14.81	14.91	15.08
		RB50#50	15.73	15.87	15.82	14.83	14.97	14.92
		RB100#0	15.72	15.87	15.96	14.82	14.97	15.06
	16QAM	RB1#0	16.15	16.16	16.57	15.25	15.26	15.67
		RB1#50	15.75	15.79	16.26	14.85	14.89	15.36
		RB1#99	14.70	14.82	15.00	13.8	13.92	14.1
		RB50#0	14.79	14.88	14.84	13.89	13.98	13.94
		RB50#50	14.78	14.87	14.96	13.88	13.97	14.06
		RB100#0	16.49	16.57	16.53	15.59	15.67	15.63

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

Antenna Gain = -0.9dBi

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	16.64	16.54	16.38	14.24	14.14	13.98
		RB1#3	16.82	16.68	16.54	14.42	14.28	14.14
		RB1#5	16.63	16.52	16.40	14.23	14.12	14.00
		RB3#0	16.77	16.72	16.53	14.37	14.32	14.13
		RB3#3	16.76	16.72	16.56	14.36	14.32	14.16
		RB6#0	15.69	15.60	15.49	13.29	13.20	13.09
	16QAM	RB1#0	15.83	15.82	15.61	13.43	13.42	13.21
		RB1#3	15.65	15.71	15.46	13.25	13.31	13.06
		RB1#5	16.01	15.70	15.62	13.61	13.30	13.22
		RB3#0	16.01	15.76	15.61	13.61	13.36	13.21
		RB3#3	14.74	14.67	14.43	12.34	12.27	12.03
		RB6#0	16.64	16.54	16.38	14.24	14.14	13.98
3.0	QPSK	RB1#0	16.67	16.58	16.49	14.27	14.18	14.09
		RB1#8	16.60	16.59	16.38	14.20	14.19	13.98
		RB1#14	16.60	16.57	16.43	14.20	14.17	14.03
		RB6#0	15.63	15.51	15.45	13.23	13.11	13.05
		RB6#9	15.63	15.46	15.41	13.23	13.06	13.01
		RB15#0	15.71	15.61	15.48	13.31	13.21	13.08
	16QAM	RB1#0	16.29	15.77	15.48	13.89	13.37	13.08
		RB1#8	16.30	15.72	15.49	13.90	13.32	13.09
		RB1#14	14.74	14.61	14.40	12.34	12.21	12.00
		RB6#0	14.71	14.62	14.40	12.31	12.22	12.00
		RB6#9	14.80	14.58	14.55	12.40	12.18	12.15
		RB15#0	16.67	16.58	16.49	14.27	14.18	14.09

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	16.59	16.52	16.36	14.19	14.12	13.96
		RB1#13	16.69	16.64	16.48	14.29	14.24	14.08
		RB1#24	16.62	16.50	16.35	14.22	14.1	13.95
		RB15#0	15.67	15.60	15.58	13.27	13.2	13.18
		RB15#10	15.67	15.60	15.47	13.27	13.2	13.07
		RB25#0	15.63	15.56	15.48	13.23	13.16	13.08
	16QAM	RB1#0	15.61	15.94	15.62	13.21	13.54	13.22
		RB1#13	15.51	15.84	15.51	13.11	13.44	13.11
		RB1#24	14.77	14.58	14.60	12.37	12.18	12.2
		RB15#0	14.73	14.59	14.51	12.33	12.19	12.11
		RB15#10	14.76	14.60	14.53	12.36	12.2	12.13
		RB25#0	16.59	16.52	16.36	14.19	14.12	13.96
10.0	QPSK	RB1#0	16.63	16.60	16.44	14.23	14.2	14.04
		RB1#25	16.76	16.75	16.56	14.36	14.35	14.16
		RB1#49	16.60	16.53	16.37	14.2	14.13	13.97
		RB25#0	15.73	15.67	15.57	13.33	13.27	13.17
		RB25#25	15.72	15.53	15.51	13.32	13.13	13.11
		RB50#0	15.71	15.62	15.53	13.31	13.22	13.13
	16QAM	RB1#0	16.46	15.76	16.28	14.06	13.36	13.88
		RB1#25	16.31	15.55	16.08	13.91	13.15	13.68
		RB1#49	14.82	14.84	14.69	12.42	12.44	12.29
		RB25#0	14.82	14.81	14.55	12.42	12.41	12.15
		RB25#25	14.76	14.71	14.55	12.36	12.31	12.15
		RB50#0	16.63	16.60	16.44	14.23	14.2	14.04

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	16.63	16.69	16.53	14.23	14.29	14.13
		RB1#38	16.79	16.79	16.65	14.39	14.39	14.25
		RB1#74	16.62	16.64	16.55	14.22	14.24	14.15
		RB36#0	15.82	15.79	15.75	13.42	13.39	13.35
		RB36#39	15.82	15.77	15.62	13.42	13.37	13.22
		RB75#0	15.83	15.76	15.69	13.43	13.36	13.29
	16QAM	RB1#0	16.45	15.96	16.12	14.05	13.56	13.72
		RB1#38	16.35	15.81	16.02	13.95	13.41	13.62
		RB1#74	14.84	14.84	14.68	12.44	12.44	12.28
		RB36#0	14.80	14.81	14.62	12.4	12.41	12.22
		RB36#39	14.84	14.79	14.69	12.44	12.39	12.29
		RB75#0	16.63	16.69	16.53	14.23	14.29	14.13
20.0	QPSK	RB1#0	16.56	16.53	16.39	14.16	14.13	13.99
		RB1#50	16.97	16.93	16.75	14.57	14.53	14.35
		RB1#99	16.54	16.47	16.36	14.14	14.07	13.96
		RB50#0	15.90	15.86	15.78	13.5	13.46	13.38
		RB50#50	15.82	15.82	15.60	13.42	13.42	13.2
		RB100#0	15.91	15.86	15.70	13.51	13.46	13.3
	16QAM	RB1#0	16.33	16.22	16.46	13.93	13.82	14.06
		RB1#50	15.89	15.74	16.01	13.49	13.34	13.61
		RB1#99	14.89	14.88	14.83	12.49	12.48	12.43
		RB50#0	14.82	14.86	14.65	12.42	12.46	12.25
		RB50#50	14.93	14.90	14.73	12.53	12.5	12.33
		RB100#0	16.56	16.53	16.39	14.16	14.13	13.99

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

Antenna Gain = -2.4dBi

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	24.14	23.74	23.68	19.09	18.69	18.63
		RB1#3	24.31	23.87	23.82	19.26	18.82	18.77
		RB1#5	24.11	23.67	23.61	19.06	18.62	18.56
		RB3#0	23.81	23.82	23.70	18.76	18.77	18.65
		RB3#3	23.71	23.77	23.65	18.66	18.72	18.6
		RB6#0	23.00	22.98	22.70	17.95	17.93	17.65
	16QAM	RB1#0	22.86	22.99	22.86	17.81	17.94	17.81
		RB1#3	22.66	22.80	22.66	17.61	17.75	17.61
		RB1#5	22.91	22.70	22.75	17.86	17.65	17.7
		RB3#0	22.93	22.78	22.75	17.88	17.73	17.7
		RB3#3	22.18	22.30	21.64	17.13	17.25	16.59
		RB6#0	24.14	23.74	23.68	19.09	18.69	18.63
3.0	QPSK	RB1#0	23.66	23.69	23.7	18.61	18.64	18.65
		RB1#8	23.67	23.74	23.7	18.62	18.69	18.65
		RB1#14	23.62	23.68	23.7	18.57	18.63	18.65
		RB6#0	22.63	22.66	22.7	17.58	17.61	17.65
		RB6#9	22.65	22.69	22.6	17.6	17.64	17.55
		RB15#0	22.68	22.70	22.7	17.63	17.65	17.65
	16QAM	RB1#0	23.20	22.88	22.7	18.15	17.83	17.65
		RB1#8	23.16	22.82	22.6	18.11	17.77	17.55
		RB1#14	21.71	21.92	21.6	16.66	16.87	16.55
		RB6#0	22.07	22.20	21.6	17.02	17.15	16.55
		RB6#9	22.13	22.14	21.7	17.08	17.09	16.65
		RB15#0	23.66	23.69	23.7	18.61	18.64	18.65

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	23.57	23.58	23.56	18.52	18.53	18.51
		RB1#13	23.74	23.76	23.74	18.69	18.71	18.69
		RB1#24	23.60	23.63	23.54	18.55	18.58	18.49
		RB15#0	22.64	22.70	22.70	17.59	17.65	17.65
		RB15#10	22.75	22.69	22.71	17.7	17.64	17.66
		RB25#0	22.66	22.66	22.64	17.61	17.61	17.59
	16QAM	RB1#0	22.63	23.04	22.78	17.58	17.99	17.73
		RB1#13	22.47	22.87	22.62	17.42	17.82	17.57
		RB1#24	21.67	21.71	21.73	16.62	16.66	16.68
		RB15#0	21.77	21.77	21.70	16.72	16.72	16.65
		RB15#10	21.82	21.75	21.71	16.77	16.7	16.66
		RB25#0	23.57	23.58	23.56	18.52	18.53	18.51
10.0	QPSK	RB1#0	23.63	23.71	23.72	18.58	18.66	18.67
		RB1#25	23.79	23.85	23.79	18.74	18.8	18.74
		RB1#49	23.70	23.75	23.67	18.65	18.7	18.62
		RB25#0	22.69	22.84	22.75	17.64	17.79	17.7
		RB25#25	22.75	22.69	22.74	17.7	17.64	17.69
		RB50#0	22.73	22.77	22.76	17.68	17.72	17.71
	16QAM	RB1#0	23.32	22.97	22.83	18.27	17.92	17.78
		RB1#25	23.18	22.86	22.63	18.13	17.81	17.58
		RB1#49	21.71	21.84	21.86	16.66	16.79	16.81
		RB25#0	21.85	21.72	21.83	16.8	16.67	16.78
		RB25#25	21.80	21.76	21.77	16.75	16.71	16.72
		RB50#0	23.63	23.71	23.72	18.58	18.66	18.67

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

Antenna Gain = -2.9dBi = -5.05dBd (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	15.97	16.41	16.45	15.87	16.31	16.35
		RB1#13	16.09	16.55	16.62	15.99	16.45	16.52
		RB1#24	16.04	16.46	16.50	15.94	16.36	16.4
		RB15#0	15.02	15.48	15.60	14.92	15.38	15.5
		RB15#10	15.09	15.53	15.57	14.99	15.43	15.47
		RB25#0	15.11	15.51	15.55	15.01	15.41	15.45
	16QAM	RB1#0	15.17	15.91	15.71	15.07	15.81	15.61
		RB1#13	14.99	15.72	15.56	14.89	15.62	15.46
		RB1#24	14.48	14.51	14.61	14.38	14.41	14.51
		RB15#0	14.57	14.55	14.62	14.47	14.45	14.52
		RB15#10	14.55	14.54	14.65	14.45	14.44	14.55
		RB25#0	15.97	16.41	16.45	15.87	16.31	16.35
10.0	QPSK	RB1#0	16.47	16.61	16.58	16.37	16.51	16.48
		RB1#25	16.31	16.69	16.70	16.21	16.59	16.6
		RB1#49	16.34	16.61	16.63	16.24	16.51	16.53
		RB25#0	15.51	15.54	15.53	15.41	15.44	15.43
		RB25#25	15.64	15.58	15.59	15.54	15.48	15.49
		RB50#0	15.60	15.57	15.59	15.5	15.47	15.49
	16QAM	RB1#0	16.10	15.89	15.70	16	15.79	15.6
		RB1#25	15.99	15.72	15.64	15.89	15.62	15.54
		RB1#49	14.57	14.62	14.64	14.47	14.52	14.54
		RB25#0	14.72	14.64	14.71	14.62	14.54	14.61
		RB25#25	14.58	14.62	14.64	14.48	14.52	14.54
		RB50#0	16.47	16.61	16.58	16.37	16.51	16.48

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	16.41	16.54	16.43	16.31	16.44	16.33
		RB1#38	16.58	16.61	16.56	16.48	16.51	16.46
		RB1#74	16.48	16.52	16.52	16.38	16.42	16.42
		RB36#0	15.57	15.61	15.56	15.47	15.51	15.46
		RB36#39	15.70	15.57	15.60	15.6	15.47	15.5
		RB75#0	15.61	15.60	15.56	15.51	15.5	15.46
	16QAM	RB1#0	16.24	15.72	15.97	16.14	15.62	15.87
		RB1#38	16.01	15.66	15.92	15.91	15.56	15.82
		RB1#74	14.55	14.60	14.54	14.45	14.5	14.44
		RB36#0	14.66	14.58	14.62	14.56	14.48	14.52
		RB36#39	14.60	14.64	14.55	14.5	14.54	14.45
		RB75#0	16.41	16.54	16.43	16.31	16.44	16.33
20.0	QPSK	RB1#0	16.26	16.36	16.24	16.16	16.26	16.14
		RB1#50	16.66	16.77	16.69	16.56	16.67	16.59
		RB1#99	16.22	16.39	16.34	16.12	16.29	16.24
		RB50#0	15.43	15.59	15.53	15.33	15.49	15.43
		RB50#50	15.68	15.58	15.54	15.58	15.48	15.44
		RB100#0	15.62	15.59	15.55	15.52	15.49	15.45
	16QAM	RB1#0	15.95	15.93	16.24	15.85	15.83	16.14
		RB1#50	15.67	15.59	15.90	15.57	15.49	15.8
		RB1#99	14.49	14.62	14.54	14.39	14.52	14.44
		RB50#0	14.70	14.59	14.57	14.6	14.49	14.47
		RB50#50	14.65	14.63	14.60	14.55	14.53	14.5
		RB100#0	16.26	16.36	16.24	16.16	16.26	16.14

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

Antenna Gain = -0.1dBi

Limit: EIRP ≤ 33dBm

LTE Band 38

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	RB1#0	14.99	14.94	14.87	14.89	14.84	14.77
		RB1#13	14.12	14.05	14.97	14.02	13.95	14.87
		RB1#24	15.98	15.92	14.84	15.88	15.82	14.74
		RB15#0	14.10	14.00	14.92	14.00	13.90	14.82
		RB15#10	14.09	14.02	14.97	13.99	13.92	14.87
		RB25#0	14.09	14.03	14.94	13.99	13.93	14.84
	16QAM	RB1#0	14.13	14.26	14.93	14.03	14.16	14.83
		RB1#13	14.27	14.34	14.02	14.17	14.24	13.92
		RB1#24	14.09	14.22	14.91	13.99	14.12	14.81
		RB15#0	14.13	14.05	14.88	14.03	13.95	14.78
		RB15#10	14.12	14.10	14.91	14.02	14.00	14.81
		RB25#0	14.14	14.00	14.96	14.04	13.90	14.86
10	QPSK	RB1#0	14.14	14.09	14.00	14.04	13.99	13.90
		RB1#25	14.37	14.34	14.30	14.27	14.24	14.2
		RB1#49	14.02	14.91	14.00	13.92	14.81	13.90
		RB25#0	14.15	14.03	14.94	14.05	13.93	14.84
		RB25#25	14.10	14.10	14.06	14.00	14.00	13.96
		RB50#0	14.12	14.09	14.00	14.02	13.99	13.9
	16QAM	RB1#0	14.44	14.08	14.15	14.34	13.98	14.05
		RB1#25	15.63	14.27	14.42	15.53	14.17	14.32
		RB1#49	14.31	14.08	14.14	14.21	13.98	14.04
		RB25#0	14.15	14.11	14.00	14.05	14.01	13.90
		RB25#25	14.12	14.15	14.10	14.02	14.05	14.00
		RB50#0	14.13	14.10	14.05	14.03	14.00	13.95

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15	QPSK	RB1#0	14.09	14.95	14.93	13.99	14.85	14.83
		RB1#38	14.10	14.06	14.03	14.00	13.96	13.93
		RB1#74	14.02	14.97	14.94	13.92	14.87	14.84
		RB36#0	14.16	14.08	14.98	14.06	13.98	14.88
		RB36#39	14.09	14.08	14.04	13.99	13.98	13.94
		RB75#0	14.11	14.11	14.01	14.01	14.01	13.91
	16QAM	RB1#0	14.36	14.97	14.17	14.26	14.87	14.07
		RB1#38	14.37	14.05	14.26	14.27	13.95	14.16
		RB1#74	14.47	14.86	14.17	14.37	14.76	14.07
		RB36#0	14.14	14.02	14.02	14.04	13.92	13.92
		RB36#39	14.08	14.02	14.08	13.98	13.92	13.98
		RB75#0	14.07	14.08	14.02	13.97	13.98	13.92
20	QPSK	RB1#0	14.86	14.80	14.86	14.76	14.70	14.76
		RB1#50	14.20	14.09	14.31	14.10	13.99	14.21
		RB1#99	14.80	14.76	14.82	14.70	14.66	14.72
		RB50#0	14.15	14.04	14.94	14.05	13.94	14.84
		RB50#50	14.10	14.15	14.11	14.00	14.05	14.01
		RB100#0	14.11	14.13	14.02	14.01	14.03	13.92
	16QAM	RB1#0	14.04	14.82	14.04	13.94	14.72	13.94
		RB1#50	14.43	14.06	14.10	14.33	13.96	14.00
		RB1#99	14.96	14.81	14.11	14.86	14.71	14.01
		RB50#0	14.17	14.11	14.13	14.07	14.01	14.03
		RB50#50	14.12	14.23	14.13	14.02	14.13	14.03
		RB100#0	14.12	14.15	14.06	14.02	14.05	13.96

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
 Antenna Gain = -0.1dBi
 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	QPSK	RB1#0	16.11	15.92	15.87	16.01	15.82	15.77
		RB1#13	16.25	16.09	15.97	16.15	15.99	15.87
		RB1#24	16.12	15.97	15.82	16.02	15.87	15.72
		RB15#0	15.17	14.97	14.93	15.07	14.87	14.83
		RB15#10	15.21	15.05	14.93	15.11	14.95	14.83
		RB25#0	15.19	15.01	14.95	15.09	14.91	14.85
	16QAM	RB1#0	15.43	14.96	14.98	15.33	14.86	14.88
		RB1#13	15.54	15.12	15.11	15.44	15.02	15.01
		RB1#24	15.41	14.98	14.92	15.31	14.88	14.82
		RB15#0	14.22	13.92	13.98	14.12	13.82	13.88
		RB15#10	14.26	14.01	13.95	14.16	13.91	13.85
		RB25#0	14.18	14.06	14.00	14.08	13.96	13.90
10	QPSK	RB1#0	16.16	15.97	16.07	16.06	15.87	15.97
		RB1#25	16.43	16.35	16.31	16.33	16.25	16.21
		RB1#49	16.11	16.12	15.97	16.01	16.02	15.87
		RB25#0	15.15	15.02	15.02	15.05	14.92	14.92
		RB25#25	15.14	15.12	14.96	15.04	15.02	14.86
		RB50#0	15.15	15.06	14.98	15.05	14.96	14.88
	16QAM	RB1#0	15.45	15.12	15.19	15.35	15.02	15.09
		RB1#25	15.70	15.34	15.42	15.60	15.24	15.32
		RB1#49	15.39	15.08	15.09	15.29	14.98	14.99
		RB25#0	14.14	14.05	14.04	14.04	13.95	13.94
		RB25#25	14.14	14.16	14.04	14.04	14.06	13.94
		RB50#0	14.14	14.09	14.01	14.04	13.99	13.91

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15	QPSK	RB1#0	16.10	15.94	16.01	16.00	15.84	15.91
		RB1#38	16.16	16.06	16.03	16.06	15.96	15.93
		RB1#74	16.03	16.03	15.88	15.93	15.93	15.78
		RB36#0	15.14	15.04	15.05	15.04	14.94	14.95
		RB36#39	15.11	15.11	15.02	15.01	15.01	14.92
		RB75#0	15.14	15.06	15.01	15.04	14.96	14.91
	16QAM	RB1#0	15.37	14.94	15.26	15.27	14.84	15.16
		RB1#38	15.40	15.07	15.28	15.30	14.97	15.18
		RB1#74	15.29	15.00	15.15	15.19	14.90	15.05
		RB36#0	14.09	13.97	14.11	13.99	13.87	14.01
		RB36#39	14.12	14.06	14.05	14.02	13.96	13.95
		RB75#0	14.11	14.07	14.01	14.01	13.97	13.91
20	QPSK	RB1#0	15.98	15.78	15.93	15.88	15.68	15.83
		RB1#50	16.38	16.25	16.35	16.28	16.15	16.25
		RB1#99	15.85	15.84	15.78	15.75	15.74	15.68
		RB50#0	15.17	14.99	15.05	15.07	14.89	14.95
		RB50#50	15.13	15.22	15.02	15.03	15.12	14.92
		RB100#0	15.16	15.14	15.02	15.06	15.04	14.92
	16QAM	RB1#0	15.10	14.81	15.19	15.00	14.71	15.09
		RB1#50	15.51	15.28	15.60	15.41	15.18	15.50
		RB1#99	14.99	14.87	15.07	14.89	14.77	14.97
		RB50#0	14.15	14.05	14.10	14.05	13.95	14.00
		RB50#50	14.13	14.28	14.08	14.03	14.18	13.98
		RB100#0	14.18	14.15	14.05	14.08	14.05	13.95

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
 For Band 41: Antenna Gain = -0.1dBi
 Limit: EIRP≤33dBm

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)	5.93	5.67	5.54	13	Pass
QPSK (100RB Size)	5.77	5.74	5.67	13	Pass
16QAM (1RB Size)	6.96	7.15	6.15	13	Pass
16QAM (100RB Size)	6.54	6.54	6.47	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	5.67	5.54	13	Pass
QPSK (100RB Size)	5.80	5.74	5.80	13	Pass
16QAM (1RB Size)	7.28	7.34	6.22	13	Pass
16QAM (100RB Size)	6.57	6.63	6.67	13	Pass

LTE Band 5 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	3.81	3.72	4.36	13	Pass
QPSK (50RB Size)	5.19	5.38	5.29	13	Pass
16QAM (1RB Size)	4.84	4.55	5.13	13	Pass
16QAM (50RB Size)	6.03	6.22	6.15	13	Pass

LTE Band 7 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	5.51	5.90	5.80	13	Pass
QPSK (100RB Size)	5.58	5.58	5.64	13	Pass
16QAM (1RB Size)	6.15	7.05	7.08	13	Pass
16QAM (100RB Size)	6.41	6.35	6.31	13	Pass

LTE Band 38 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	8.01	8.98	9.64	13	Pass
QPSK (100RB Size)	8.53	8.08	8.98	13	Pass
16QAM (1RB Size)	8.97	8.76	8.86	13	Pass
16QAM (100RB Size)	9.24	9.03	8.22	13	Pass

LTE Band 41 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	8.63	8.69	8.76	13	Pass
QPSK (100RB Size)	8.42	8.41	8.76	13	Pass
16QAM (1RB Size)	8.90	8.24	8.08	13	Pass
16QAM (100RB Size)	8.22	8.53	8.19	13	Pass

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

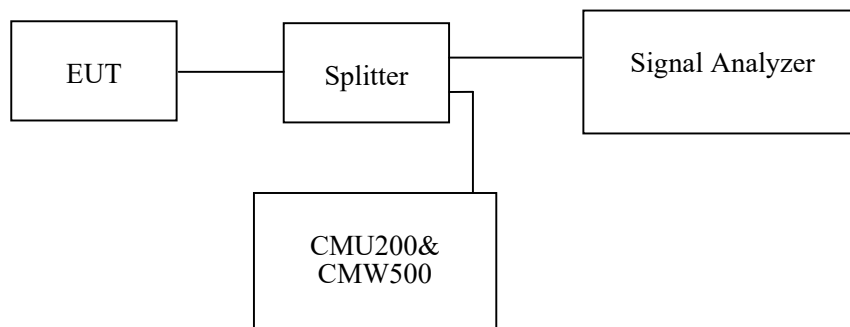
Applicable Standard

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

Test Procedure

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

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



Test Data

Environmental Conditions

Temperature:	25.2~ 29.2 °C
Relative Humidity:	51~52 %
ATM Pressure:	101.0 kPa

The testing was performed by Cala Liu and Key Pei from 2021-08-16 to 2021-09-08.

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	245.19	315.06
	190	836.6	245.19	318.27
	251	848.8	245.19	314.42
EGPRS(8PSK)	128	824.2	248.40	324.04
	190	836.6	248.40	315.38
	251	848.8	250.00	320.19

	Frequency (MHz)	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
RMC	826.4	4.18	4.73
	836.6	4.18	4.74
	846.6	4.18	4.73
HSDPA	826.4	4.18	4.73
	836.6	4.22	5.51
	846.6	4.20	4.73
HSUPA	826.4	4.20	4.81
	836.6	4.22	5.36
	846.6	4.22	5.42

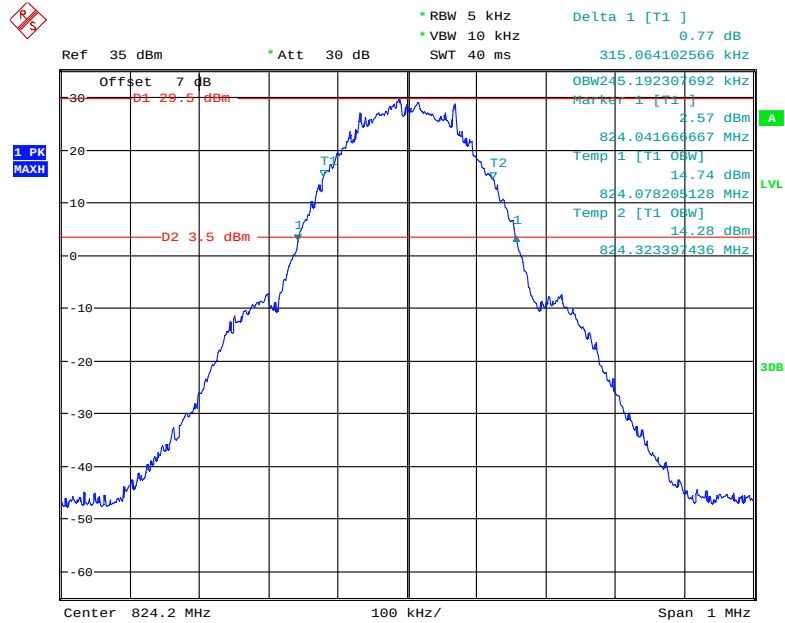
PCS Band (Part 24E)

Mode	Channel	Frequency (MHz)	99% Occupied Bandwidth (kHz)	26 dB Emission Bandwidth (kHz)
GSM(GMSK)	512	1850.2	245.20	319.87
	661	1880.0	245.19	318.59
	810	1909.8	246.79	318.59
EGPRS(8PSK)	512	1850.2	246.79	316.03
	661	1880.0	240.40	312.18
	810	1909.8	246.79	312.50

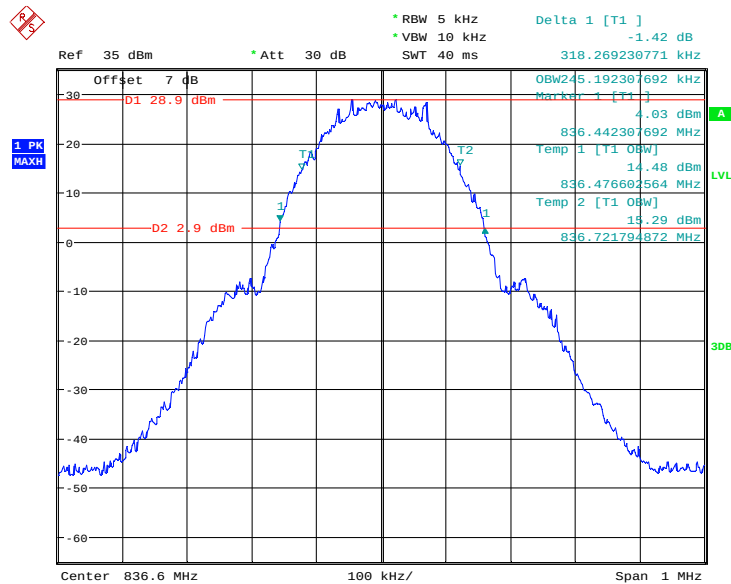
Frequency (MHz)		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
RMC	1852.4	4.20	4.74
	1880.0	4.18	4.72
	1907.6	4.20	4.72
HSDPA	1852.4	4.20	4.74
	1880.0	4.18	4.72
	1907.6	4.20	4.75
HSUPA	1852.4	4.20	4.74
	1880.0	4.18	4.74
	1907.6	4.20	4.72

AWS Band (Part 27)

Frequency (MHz)		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
RMC	1712.4	4.18	4.72
	1732.6	4.18	4.72
	1752.6	4.18	4.76
HSDPA	1712.4	4.20	4.72
	1732.6	4.20	4.74
	1752.6	4.20	4.74
HSUPA	1712.4	4.20	4.71
	1732.6	4.18	4.72
	1752.6	4.20	4.73

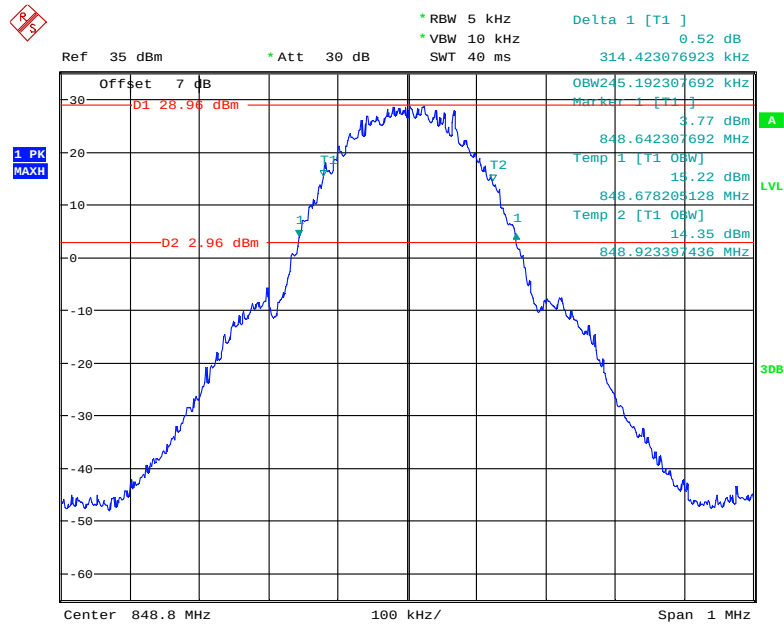
Cellular Band (Part 22H)**26 dB Emissions & 99% Occupied Bandwidth for GSM (GMSK) Mode, Low channel**

Date: 18.AUG.2021 23:56:14

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

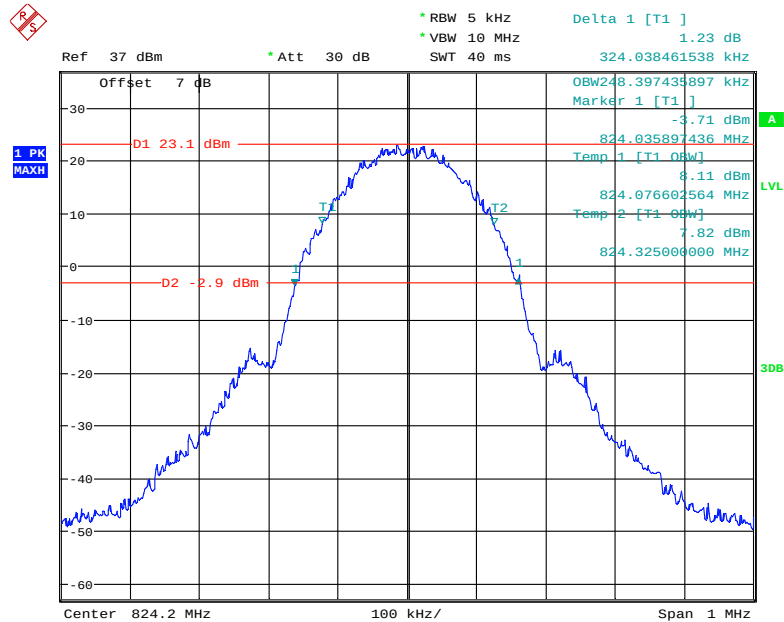
Date: 18.AUG.2021 23:59:38

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



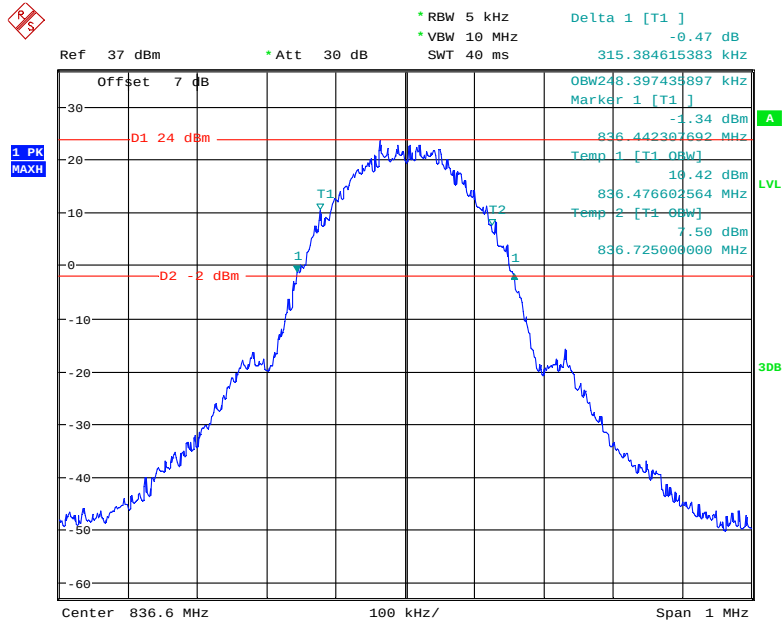
Date: 18.AUG.2021 23:50:54

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



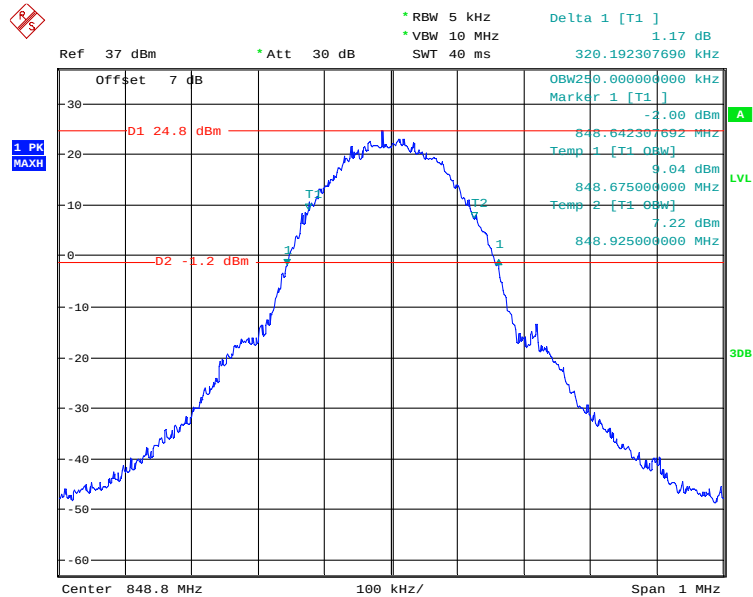
Date: 19.AUG.2021 00:20:10

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

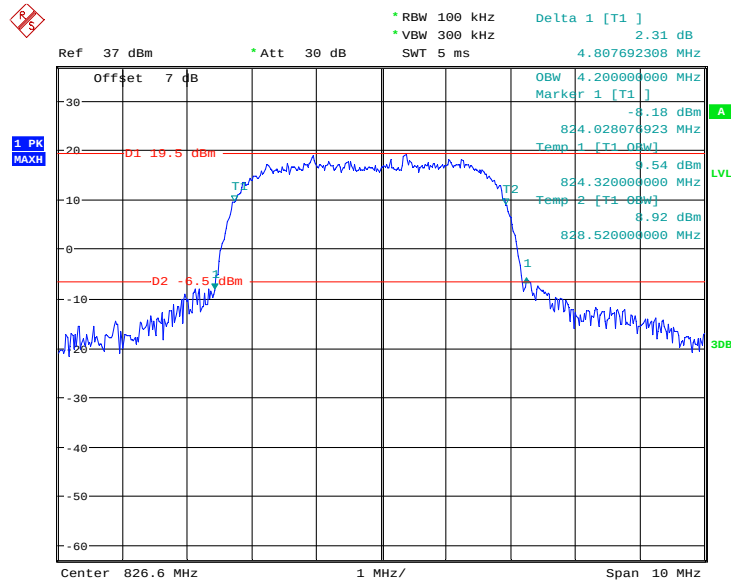


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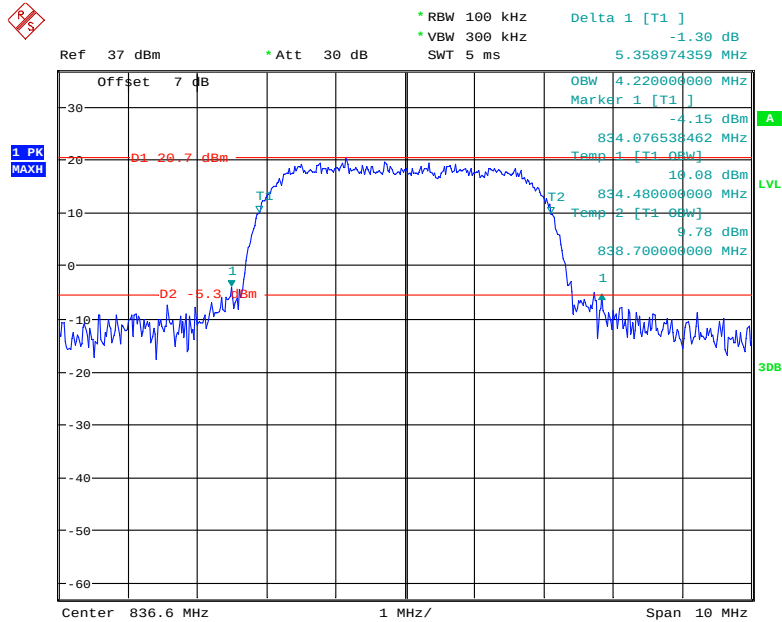
26 dB Emissions & 99% Occupied Bandwidth for EGPRS (8PSK) Mode, High channel



Date: 19.AUG.2021 00:22:50

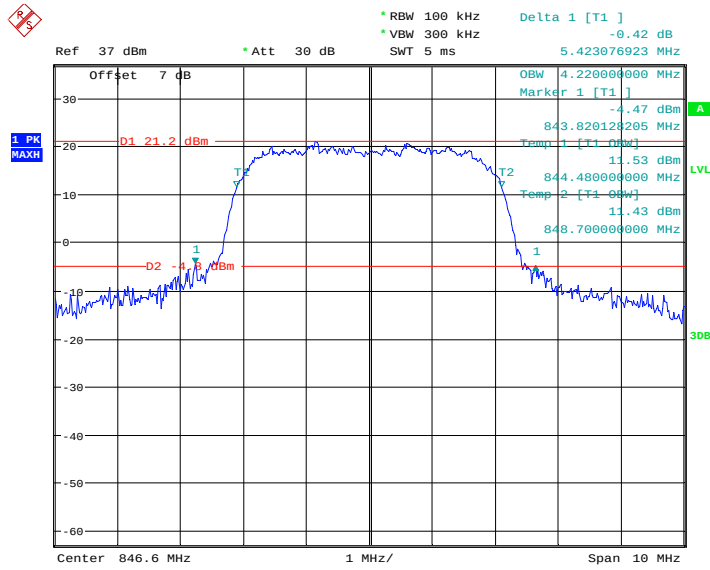
26 dB Emissions & 99% Occupied Bandwidth for HSUPA (BPSK) Mode, Low channel

Date: 19.AUG.2021 22:40:25

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

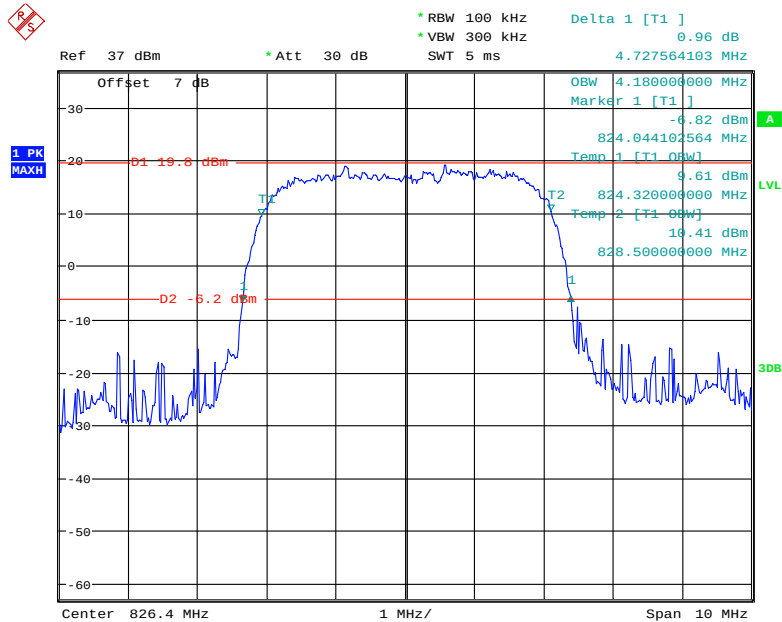
Date: 19.AUG.2021 22:42:29

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

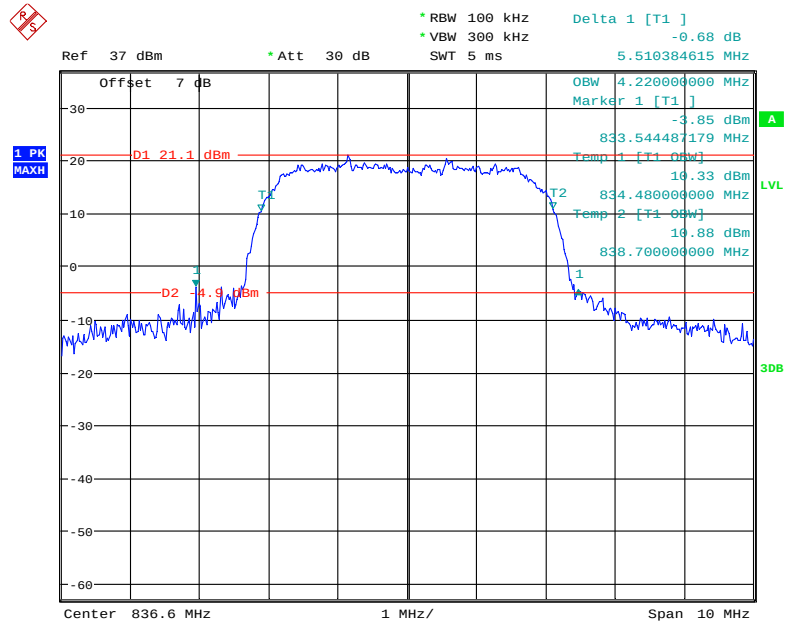


Date: 19.AUG.2021 22:38:55

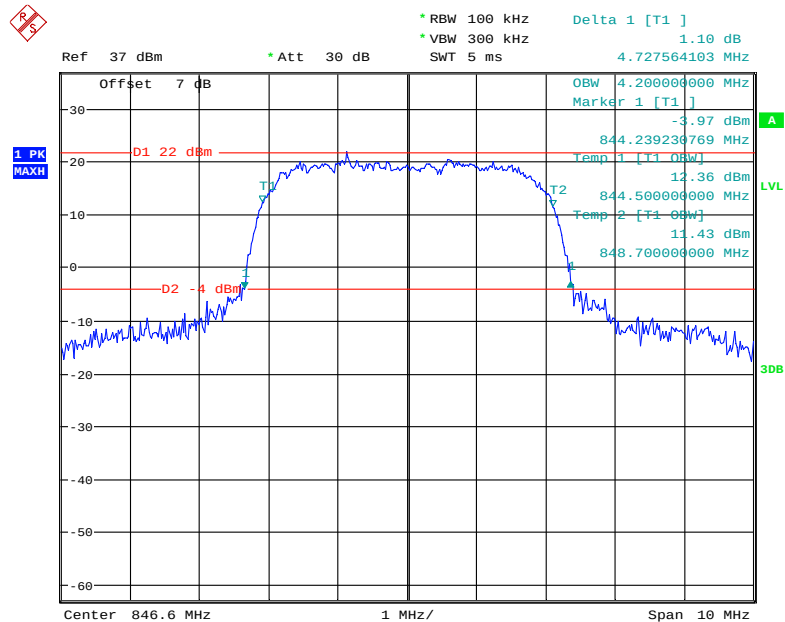
26 dB Emissions & 99% Occupied Bandwidth for HSDPA (16QAM) Mode, Low channel



Date: 19.AUG.2021 22:30:17

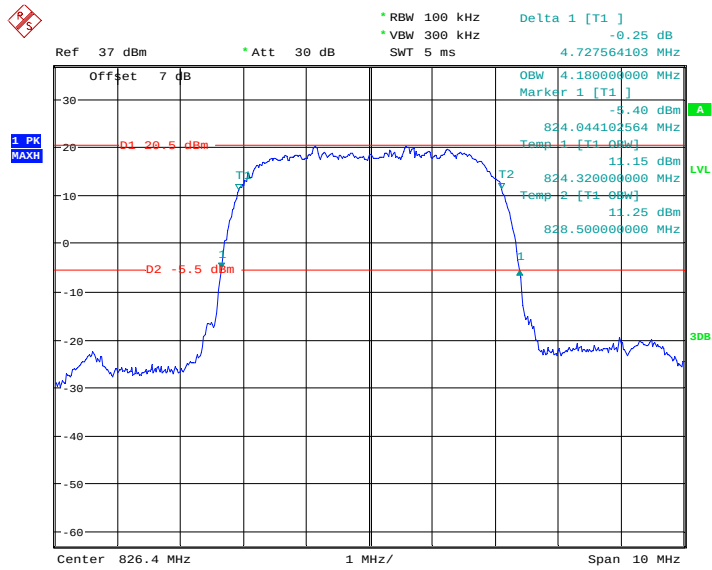
26 dB Emissions & 99% Occupied Bandwidth for HSDPA (16QAM) Mode, Middle channel

Date: 19.AUG.2021 22:35:10

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

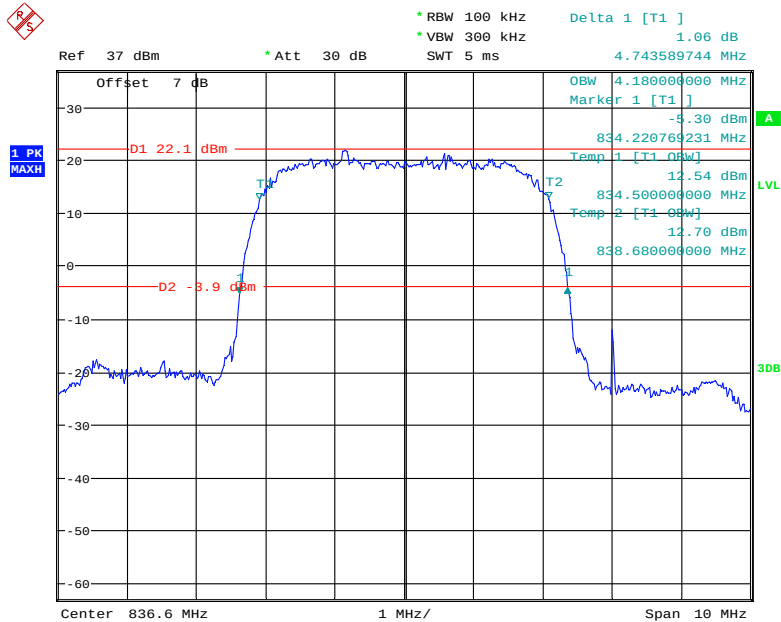
Date: 19.AUG.2021 22:28:11

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



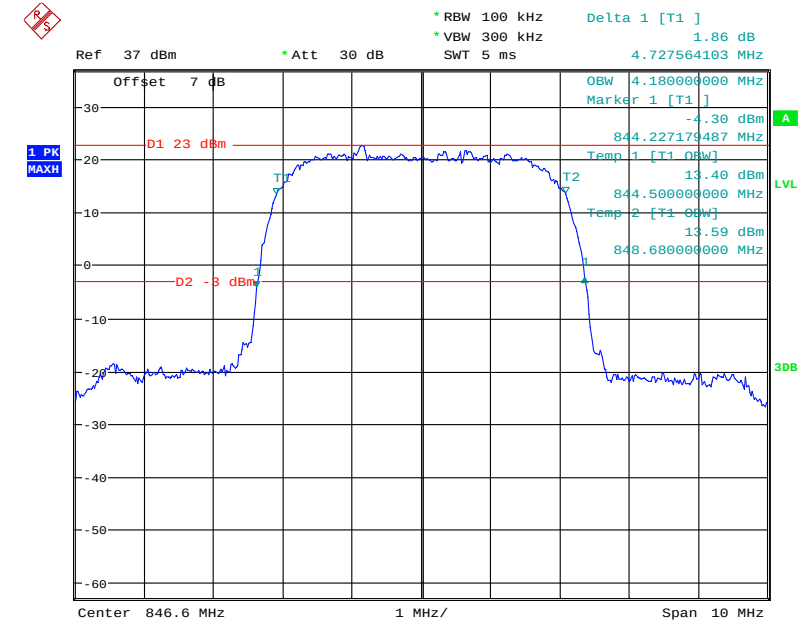
Date: 19.AUG.2021 23:09:20

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

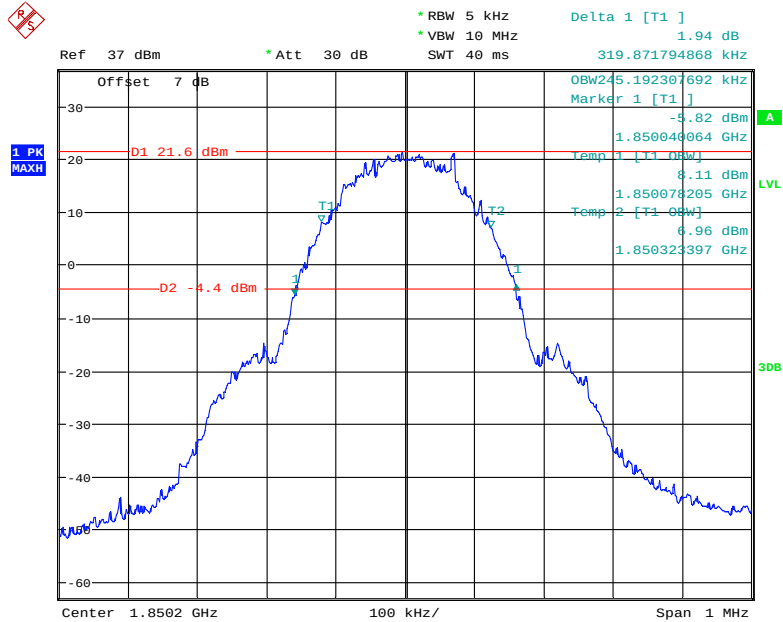


Date: 19.AUG.2021 23:10:57

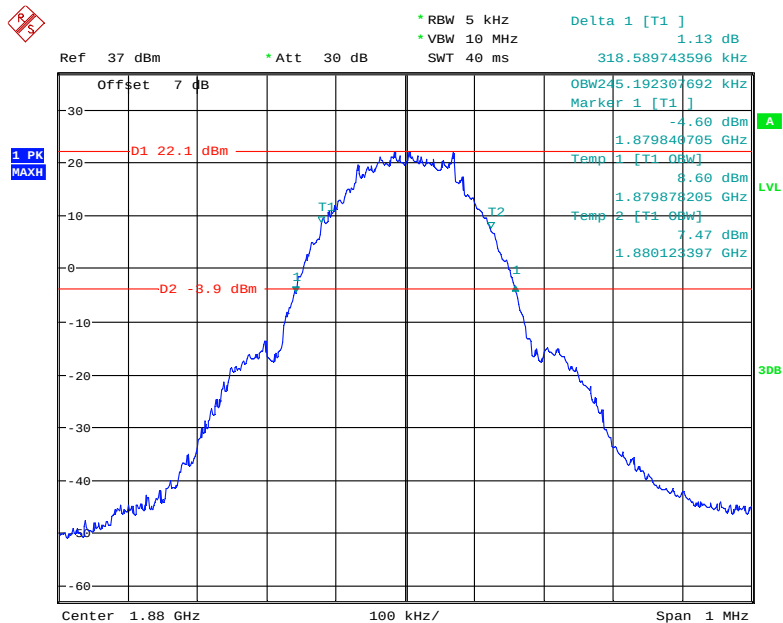
26 dB Emissions & 99% Occupied Bandwidth for RMC (BPSK) Mode, High channel



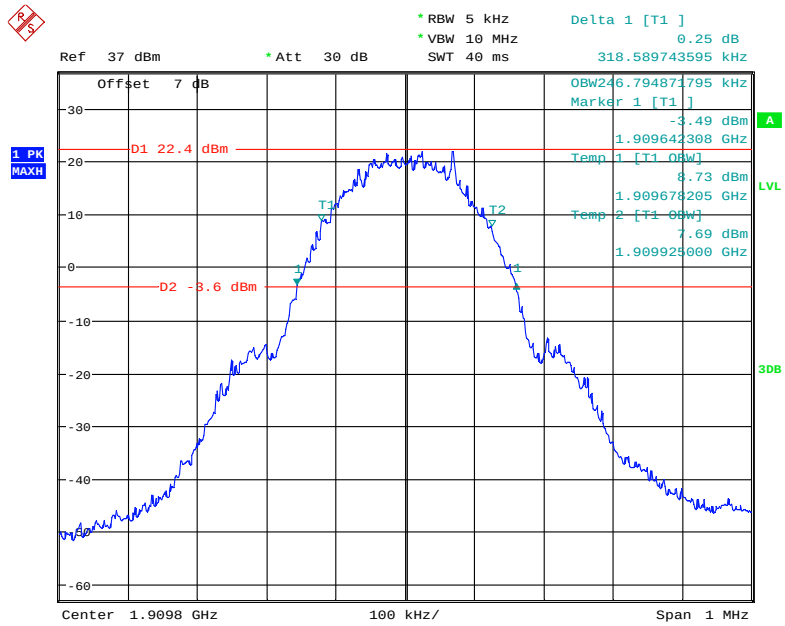
Date: 19.AUG.2021 23:07:04

PCS Band (Part 24E)**26 dB Emissions & 99% Occupied Bandwidth for GSM (GMSK) Mode, Low channel**

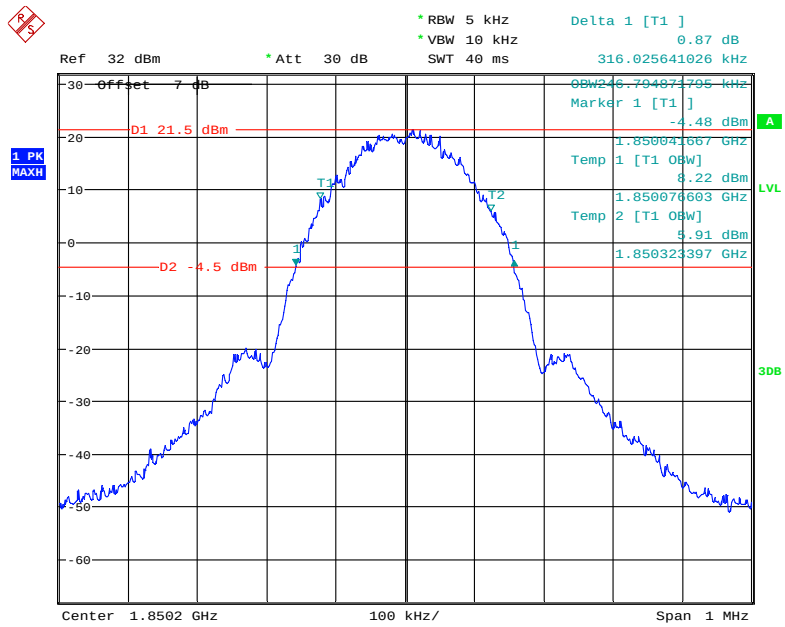
Date: 19.AUG.2021 00:35:46

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

Date: 19.AUG.2021 00:38:08

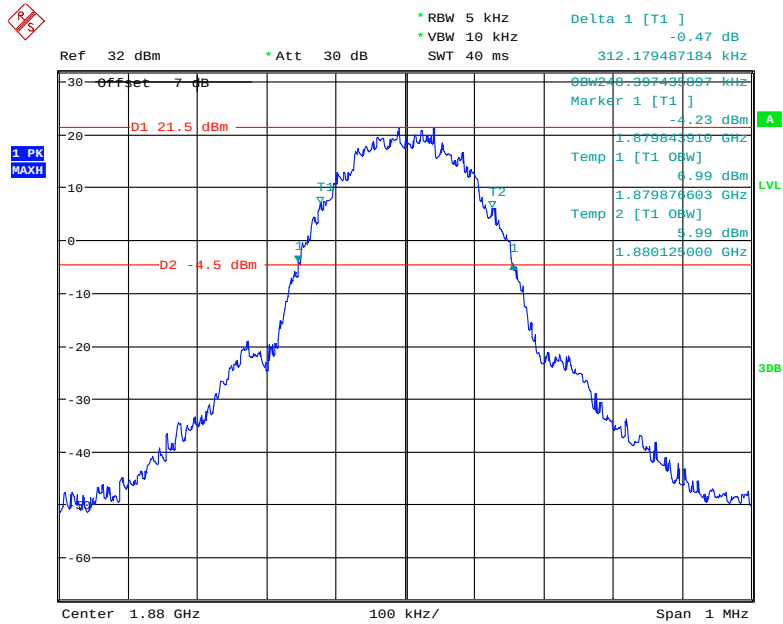
26 dB Emissions & 99% Occupied Bandwidth for GSM (GMSK) Mode, High channel

Date: 19.AUG.2021 00:33:56

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

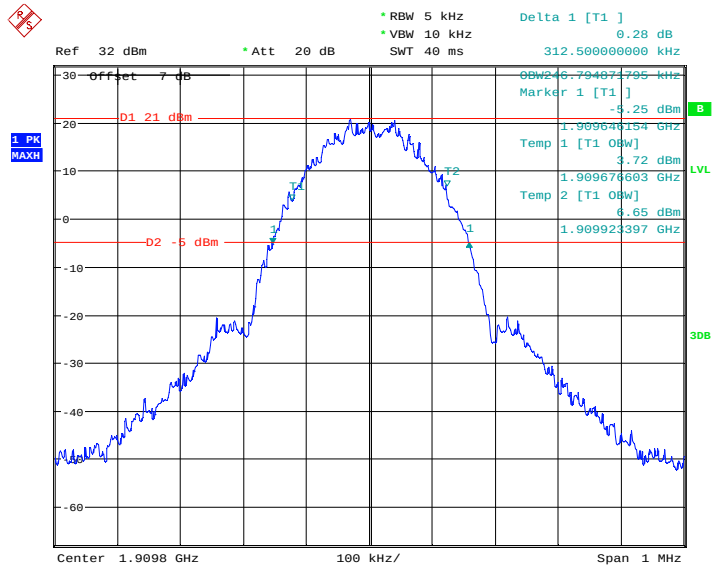
Date: 19.AUG.2021 00:58:11

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



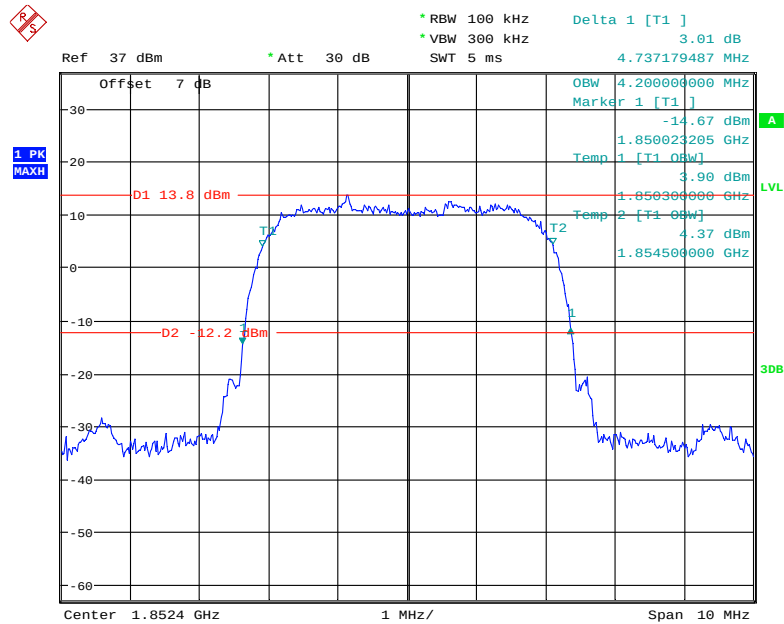
Date: 19.AUG.2021 00:59:08

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



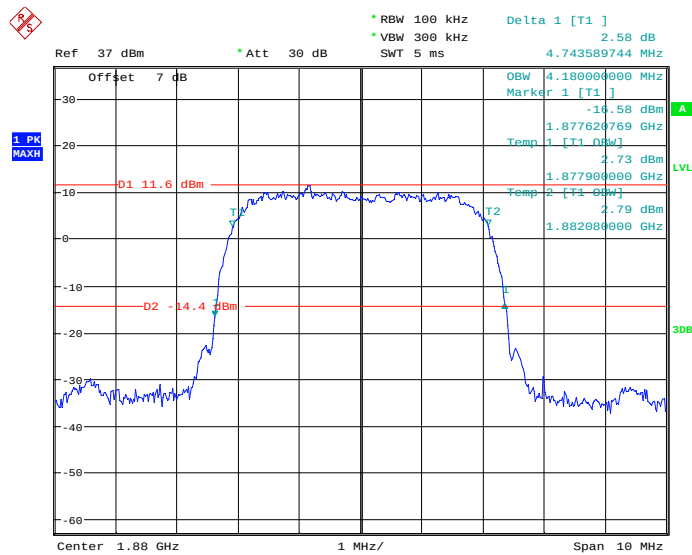
Date: 8.SEP.2021 14:08:08

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



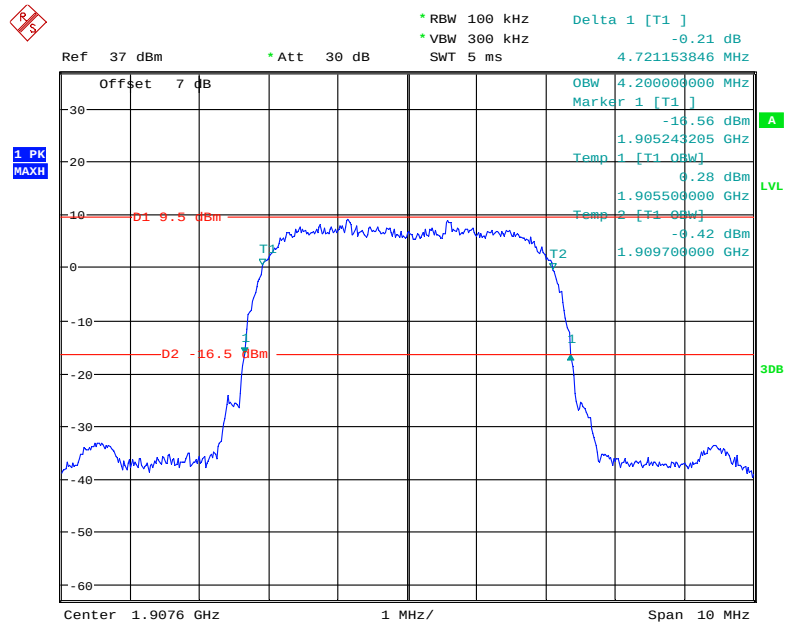
Date: 19.AUG.2021 22:52:14

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



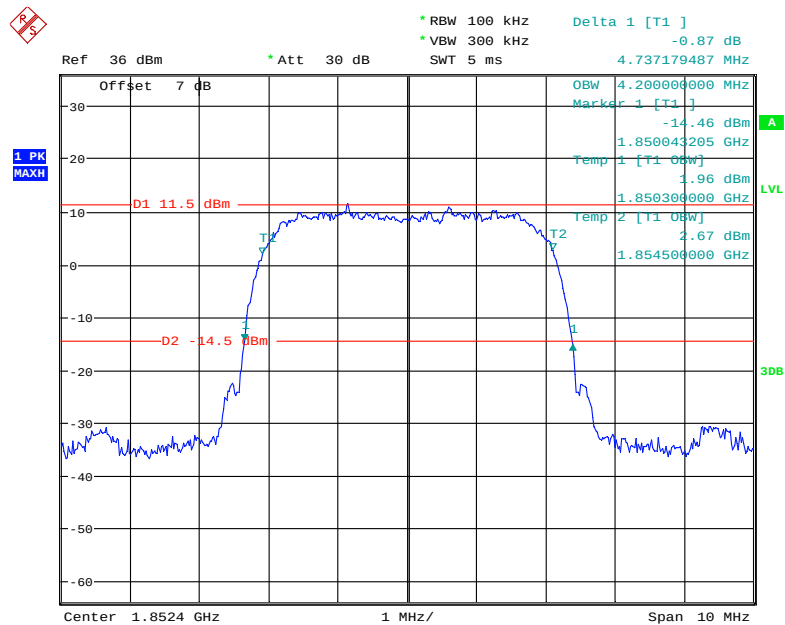
Date: 19.AUG.2021 22:54:05

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

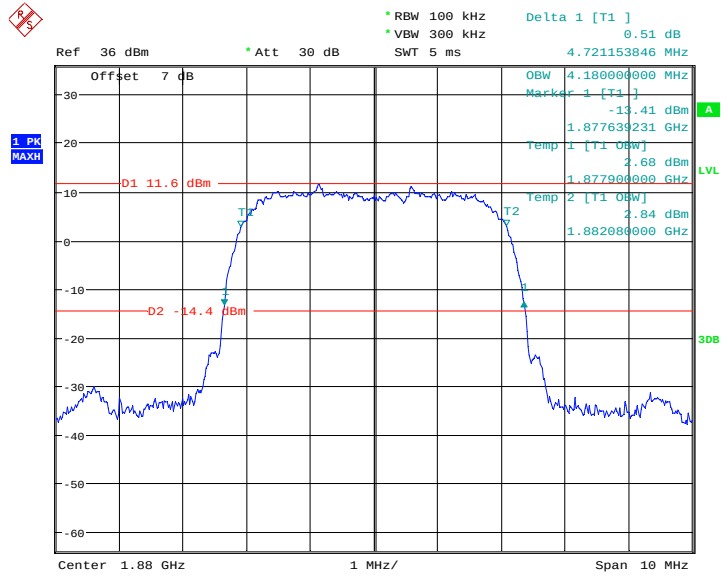


Date: 19.AUG.2021 22:50:40

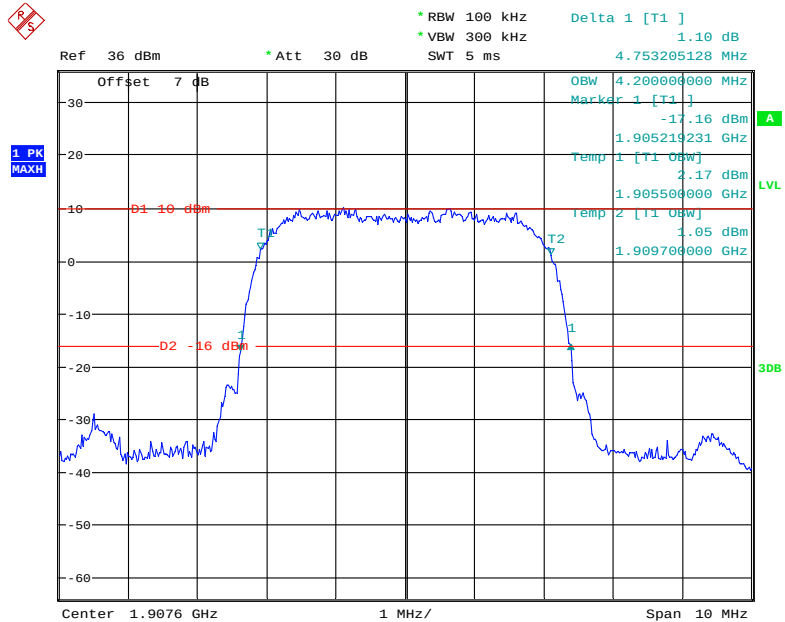
26 dB Emissions & 99% Occupied Bandwidth for HSDPA (16QAM) Mode, Low channel



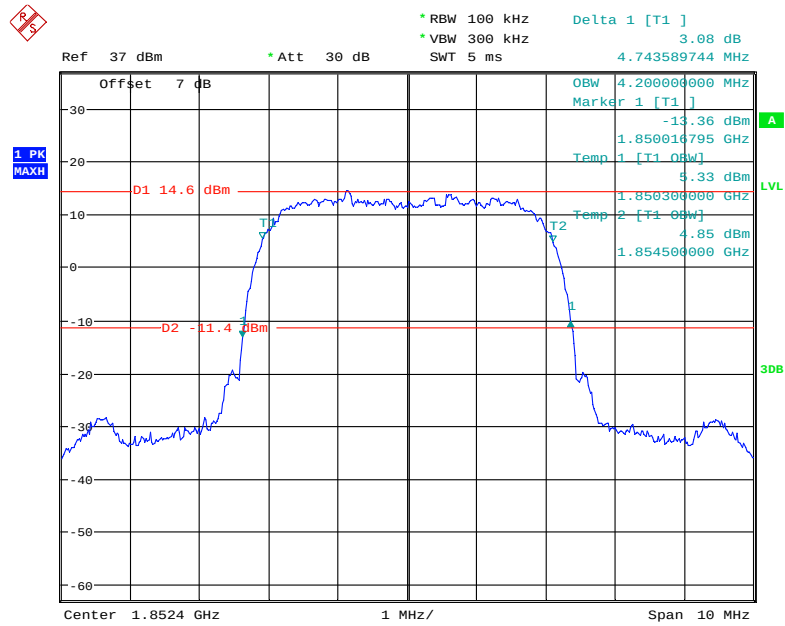
Date: 19.AUG.2021 22:05:57

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

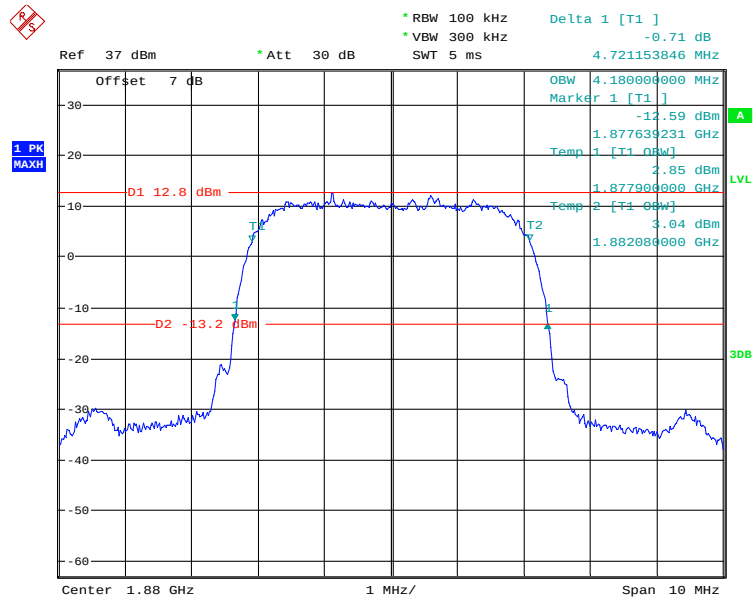
Date: 19.AUG.2021 22:19:28

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

Date: 19.AUG.2021 22:03:21

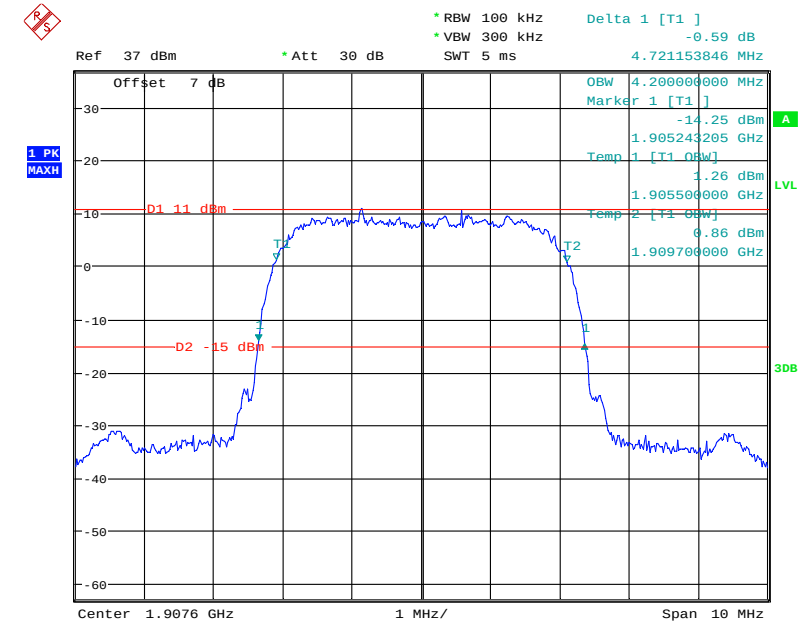
26 dB Emissions & 99% Occupied Bandwidth for RMC (BPSK) Mode, Low channel

Date: 19.AUG.2021 22:59:06

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

Date: 19.AUG.2021 22:55:40

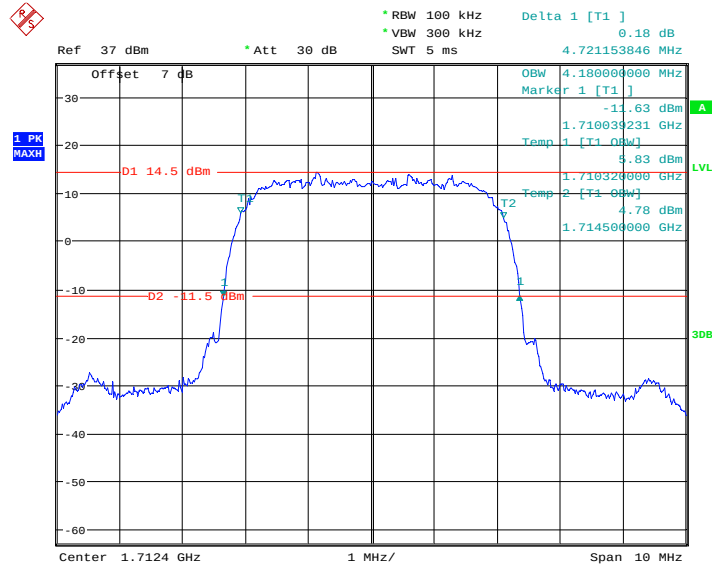
26 dB Emissions & 99% Occupied Bandwidth for RMC (BPSK) Mode, High channel



Date: 19.AUG.2021 22:57:16

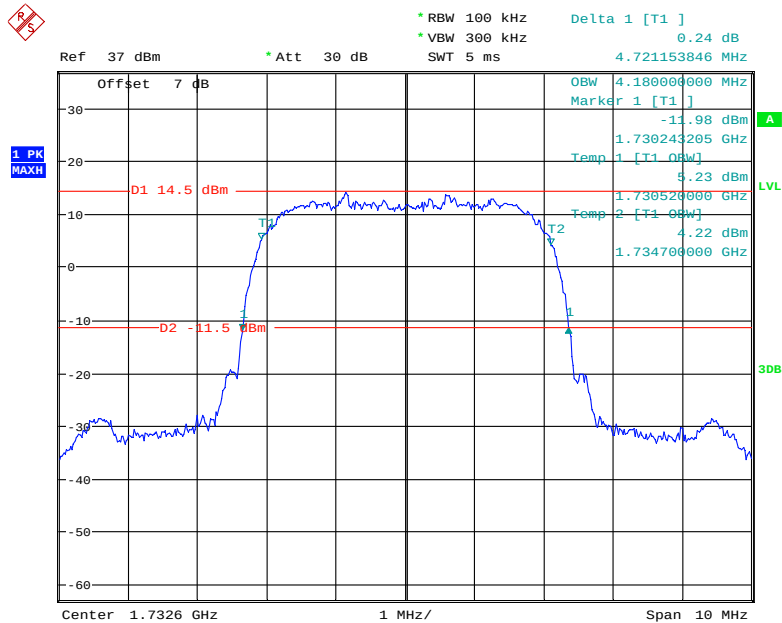
AWS Band (Part 27)

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

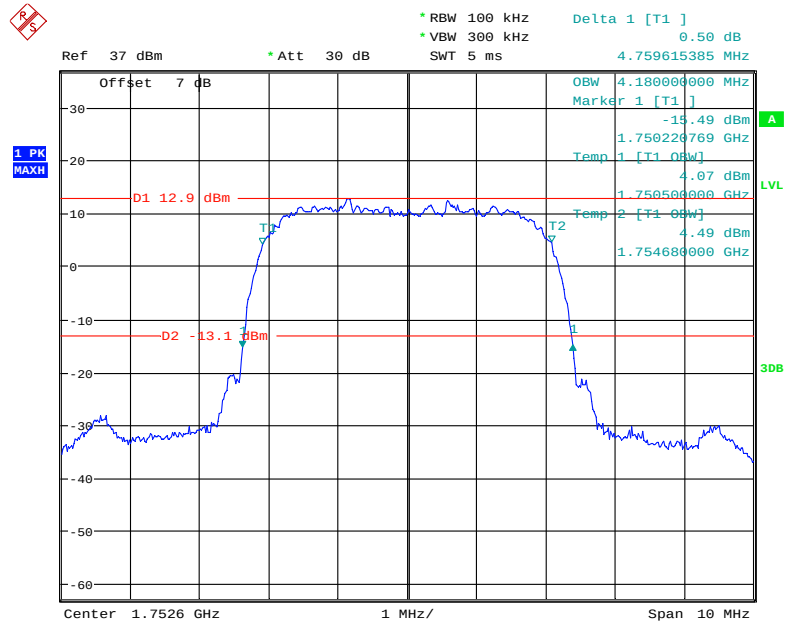


Date: 19.AUG.2021 23:03:12

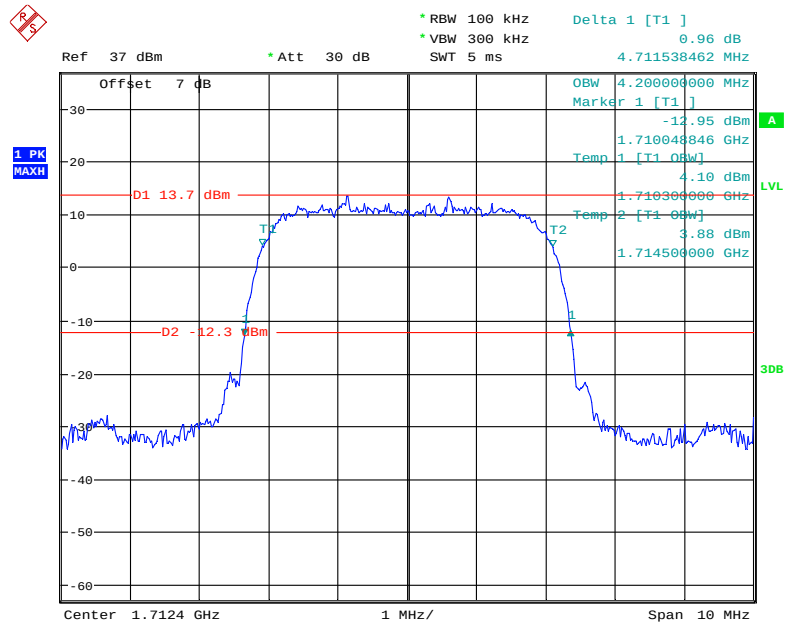
26 dB Emissions & 99% Occupied Bandwidth for RMC (BPSK) Mode, Middle channel



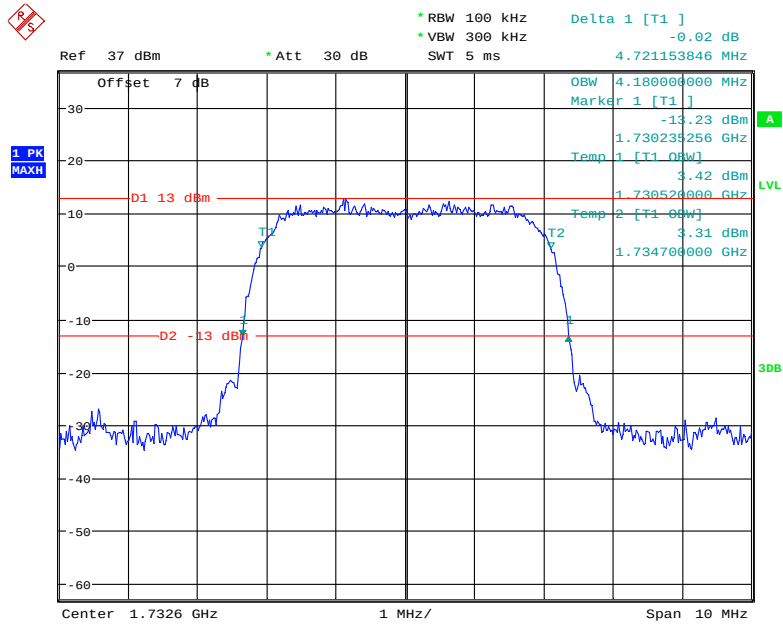
Date: 19.AUG.2021 23:04:15

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

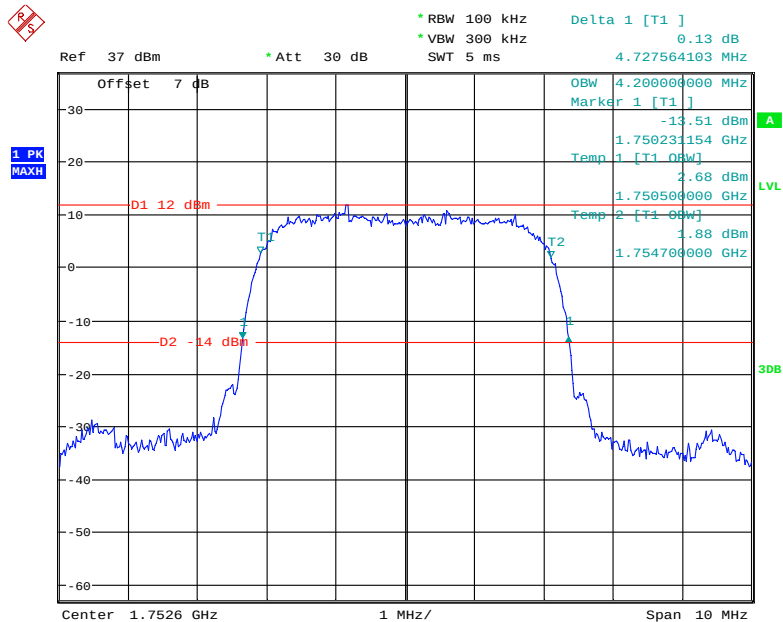
Date: 19.AUG.2021 23:01:37

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

Date: 19.AUG.2021 22:46:37

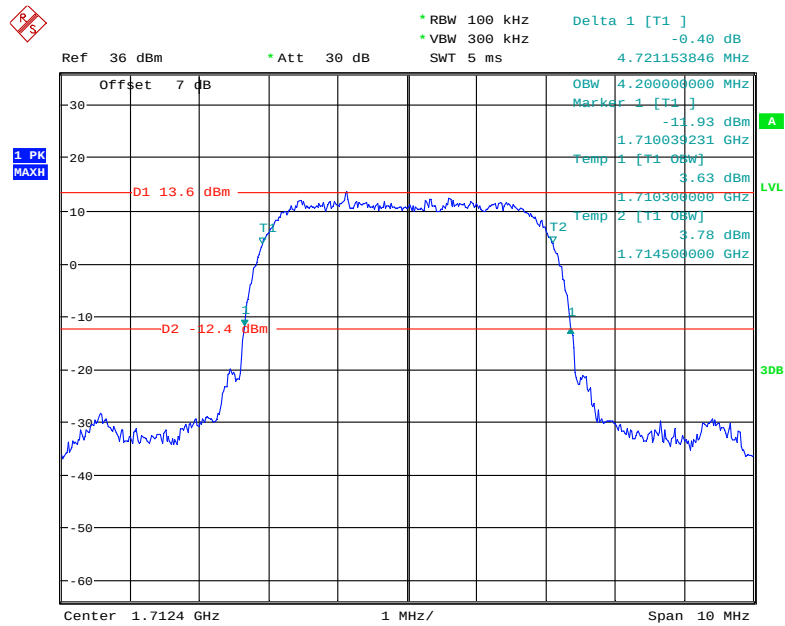
26 dB Emissions & 99% Occupied Bandwidth for HSUPA (BPSK) Mode, Middle channel

Date: 19.AUG.2021 22:47:54

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

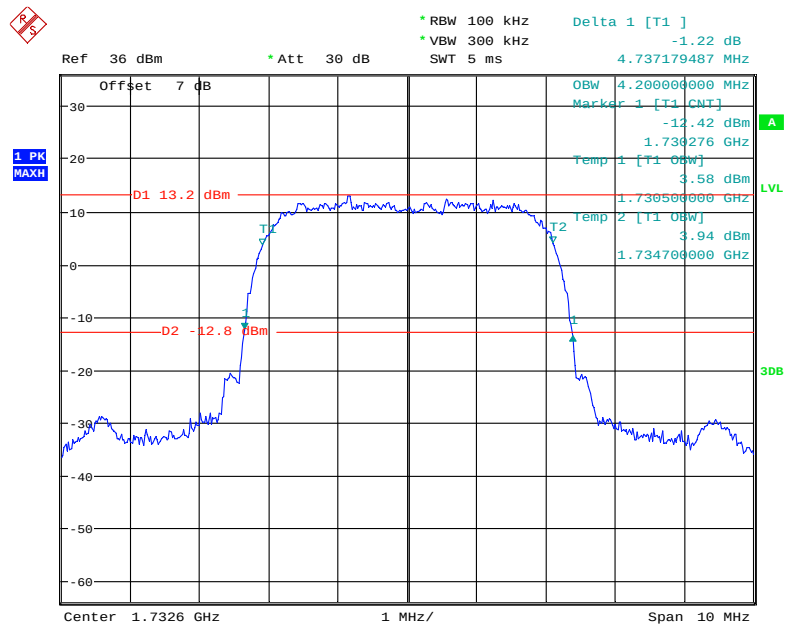
Date: 19.AUG.2021 22:44:05

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



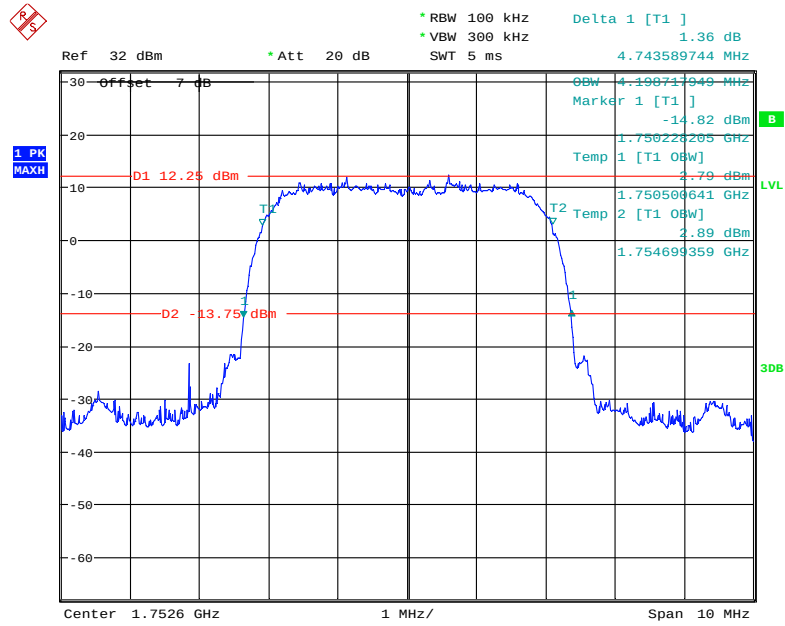
Date: 19.AUG.2021 22:24:14

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



Date: 19.AUG.2021 22:25:40

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



Date: 8.SEP.2021 13:56:08

LTE Band 2:

Bandwidth (MHz)	Modulation	Channel	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
1.4	QPSK	Low	1.104	1.308
		Middle	1.098	1.302
		High	1.104	1.296
	16QAM	Low	1.104	1.302
		Middle	1.104	1.314
		High	1.098	1.290
3	QPSK	Low	2.688	2.880
		Middle	2.688	2.880
		High	2.688	2.892
	16QAM	Low	2.688	2.892
		Middle	2.688	2.880
		High	2.688	2.880
5	QPSK	Low	4.520	4.980
		Middle	4.520	4.920
		High	4.520	4.920
	16QAM	Low	4.500	4.940
		Middle	4.520	4.960
		High	4.520	5.000
10	QPSK	Low	8.960	9.640
		Middle	8.960	9.520
		High	8.960	9.600
	16QAM	Low	9.000	9.520
		Middle	8.960	9.680
		High	8.960	9.560
15	QPSK	Low	13.500	14.820
		Middle	13.500	14.820
		High	13.560	14.820
	16QAM	Low	13.500	14.760
		Middle	13.560	14.760
		High	13.560	14.760
20	QPSK	Low	18.000	19.200
		Middle	18.000	19.360
		High	17.920	19.520
	16QAM	Low	18.000	19.360
		Middle	18.080	19.600
		High	17.920	19.360

LTE Band 4:

Bandwidth (MHz)	Modulation	Channel	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
1.4	QPSK	Low	1.098	1.296
		Middle	1.110	1.326
		High	1.104	1.296
	16QAM	Low	1.098	1.326
		Middle	1.092	1.290
		High	1.098	1.314
3	QPSK	Low	2.688	2.868
		Middle	2.688	2.880
		High	2.688	2.892
	16QAM	Low	2.688	2.892
		Middle	2.688	2.880
		High	2.688	2.880
5	QPSK	Low	4.520	4.900
		Middle	4.520	4.960
		High	4.500	4.900
	16QAM	Low	4.520	4.900
		Middle	4.520	4.960
		High	4.520	4.980
10	QPSK	Low	8.960	9.640
		Middle	8.960	9.560
		High	8.960	9.640
	16QAM	Low	8.960	9.560
		Middle	8.960	9.680
		High	8.960	9.640
15	QPSK	Low	13.560	14.940
		Middle	13.500	14.760
		High	13.560	14.760
	16QAM	Low	13.500	14.760
		Middle	13.500	14.760
		High	13.560	14.820
20	QPSK	Low	18.000	19.280
		Middle	18.000	19.280
		High	18.080	19.440
	16QAM	Low	18.080	19.360
		Middle	18.000	19.360
		High	18.000	19.360

LTE Band 5:

Bandwidth (MHz)	Modulation	Channel	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
1.4	QPSK	Low	1.104	1.380
		Middle	1.104	1.308
		High	1.110	1.308
	16QAM	Low	1.110	1.362
		Middle	1.092	1.284
		High	1.104	1.296
3	QPSK	Low	2.688	2.880
		Middle	2.700	3.012
		High	2.688	2.892
	16QAM	Low	2.688	2.892
		Middle	2.688	2.928
		High	2.676	2.868
5	QPSK	Low	4.540	5.700
		Middle	4.520	4.920
		High	4.480	4.920
	16QAM	Low	4.500	5.100
		Middle	4.520	5.760
		High	4.520	4.960
10	QPSK	Low	8.960	11.440
		Middle	8.960	9.520
		High	8.960	9.520
	16QAM	Low	8.960	9.600
		Middle	8.960	9.600
		High	8.960	10.800

LTE Band 7:

Bandwidth (MHz)	Modulation	Channel	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
5	QPSK	Low	4.520	4.960
		Middle	4.520	4.960
		High	4.500	4.920
	16QAM	Low	4.500	4.920
		Middle	4.520	4.940
		High	4.500	4.960
10	QPSK	Low	8.960	9.680
		Middle	8.960	9.560
		High	8.960	9.640
	16QAM	Low	8.920	9.560
		Middle	8.960	9.640
		High	8.960	9.600
15	QPSK	Low	13.500	14.820
		Middle	13.500	14.760
		High	13.500	14.820
	16QAM	Low	13.500	14.820
		Middle	13.500	14.820
		High	13.500	14.700
20	QPSK	Low	18.000	19.440
		Middle	18.000	19.440
		High	18.000	19.520
	16QAM	Low	18.000	19.520
		Middle	18.000	19.520
		High	18.000	19.360

LTE Band 38:

Bandwidth (MHz)	Modulation	Channel	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
5	QPSK	Low	4.500	4.960
		Middle	4.520	4.960
		High	4.520	5.420
	16QAM	Low	4.500	5.100
		Middle	4.500	5.180
		High	4.520	5.040
10	QPSK	Low	8.960	9.840
		Middle	8.960	9.680
		High	8.960	9.840
	16QAM	Low	8.960	9.520
		Middle	8.960	9.520
		High	8.960	9.840
15	QPSK	Low	13.560	15.720
		Middle	13.500	15.480
		High	13.500	15.600
	16QAM	Low	13.560	16.200
		Middle	13.560	16.380
		High	13.620	16.260
20	QPSK	Low	18.000	19.840
		Middle	18.000	19.600
		High	18.000	20.240
	16QAM	Low	18.000	20.080
		Middle	18.000	20.240
		High	18.000	19.520

LTE Band 41:

Bandwidth (MHz)	Modulation	Channel	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
5	QPSK	Low	4.500	5.240
		Middle	4.500	4.960
		High	4.520	4.920
	16QAM	Low	4.500	5.020
		Middle	4.500	5.000
		High	4.520	5.100
10	QPSK	Low	8.960	9.640
		Middle	8.960	9.640
		High	8.960	9.560
	16QAM	Low	8.960	9.520
		Middle	8.920	9.480
		High	8.960	9.640
15	QPSK	Low	13.560	14.940
		Middle	13.560	15.240
		High	13.500	15.540
	16QAM	Low	13.620	15.900
		Middle	13.560	16.020
		High	13.560	15.540
20	QPSK	Low	18.080	19.680
		Middle	17.920	19.200
		High	18.000	19.680
	16QAM	Low	17.920	19.520
		Middle	18.000	20.080
		High	18.000	19.520

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

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

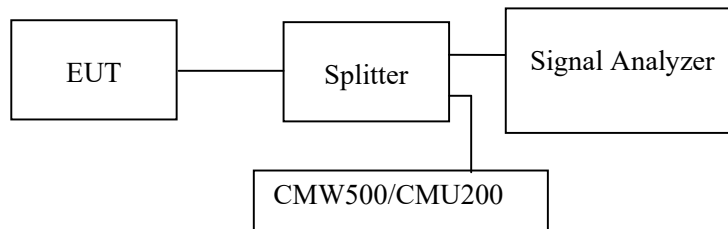
Applicable Standard

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

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

Test Procedure

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



Test Data

Environmental Conditions

Temperature:	25.2~ 29.2 °C
Relative Humidity:	51~52 %
ATM Pressure:	101.0 kPa

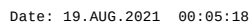
The testing was performed by Cala Liu and Key Pei from 2021-08-16 to 2021-08-19.

EUT operation mode: Transmitting

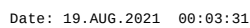
Test result: Pass

Please refer to the following plots.

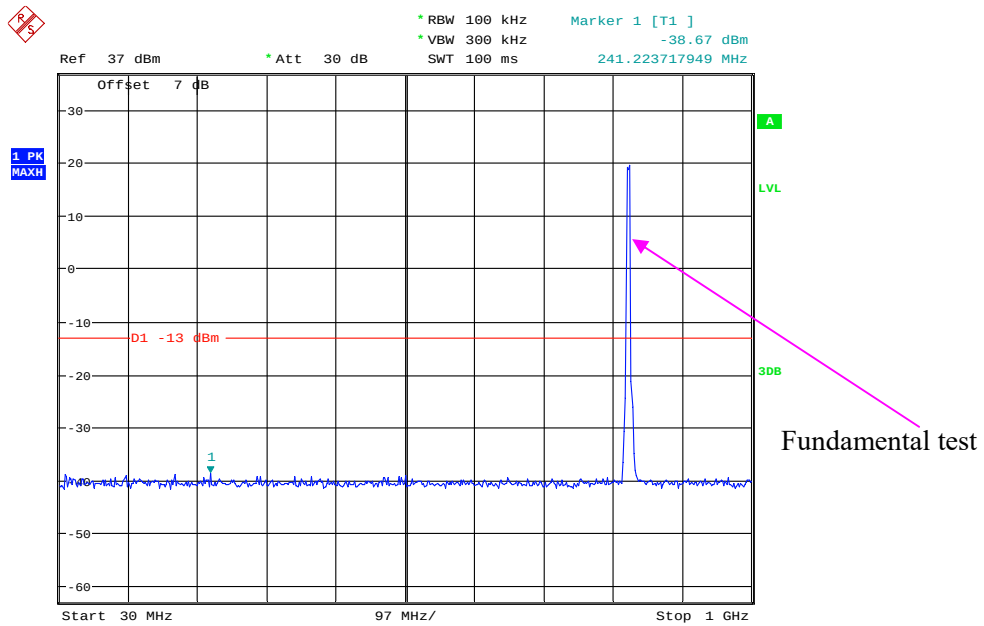
30 MHz – 1 GHz (GSM Mode)



1 GHz – 10 GHz (GSM Mode)

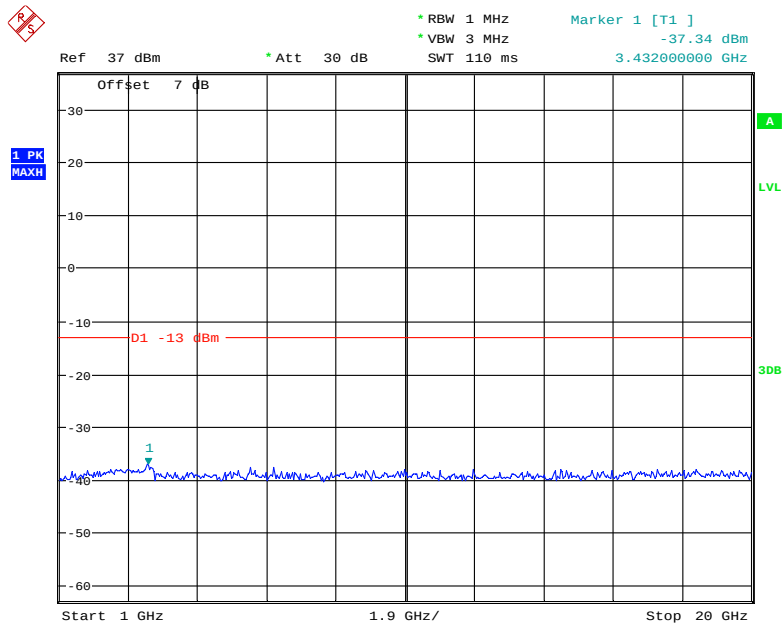


30 MHz – 1 GHz (WCDMA Mode)



Date: 19.AUG.2021 23:24:57

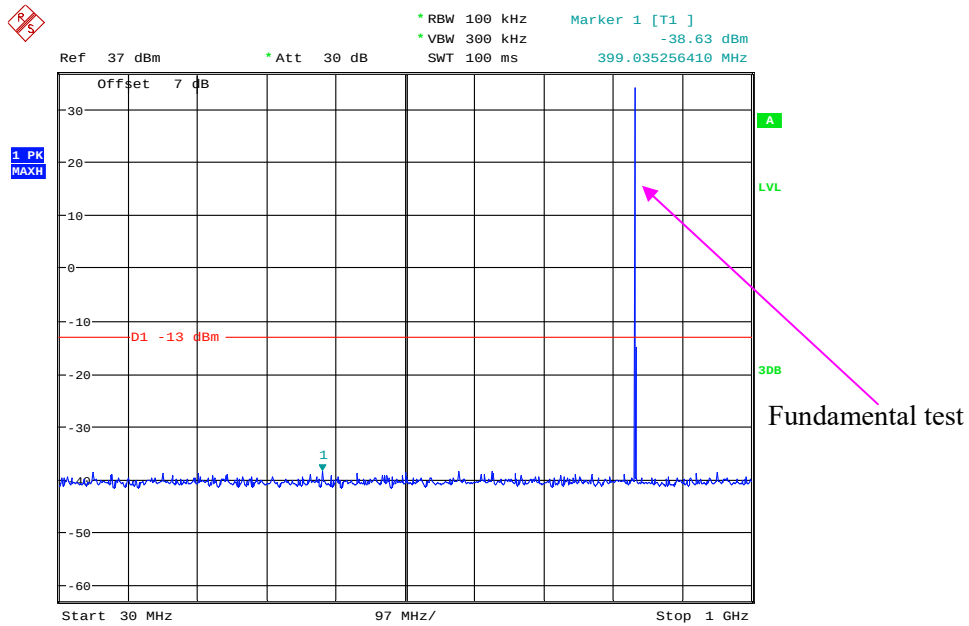
1 GHz – 20 GHz (WCDMA Mode)



Date: 19.AUG.2021 23:15:21

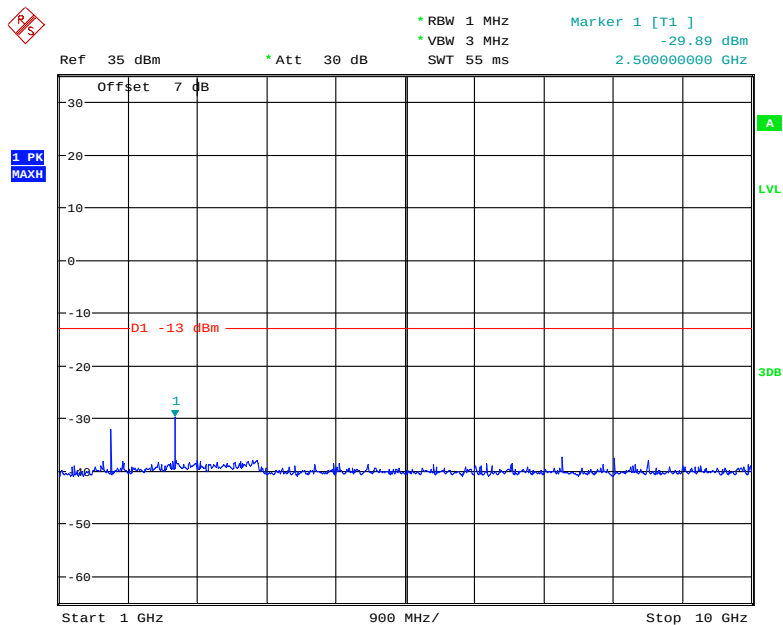
Middle Channel:

30 MHz – 1 GHz (GSM Mode)



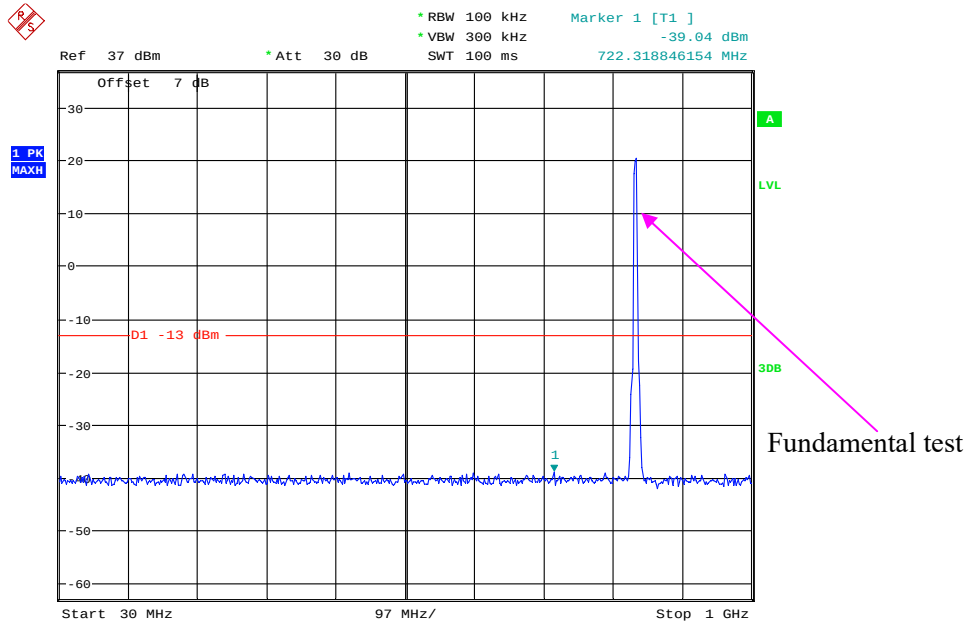
Date: 19.AUG.2021 00:06:41

1 GHz – 10 GHz (GSM Mode)



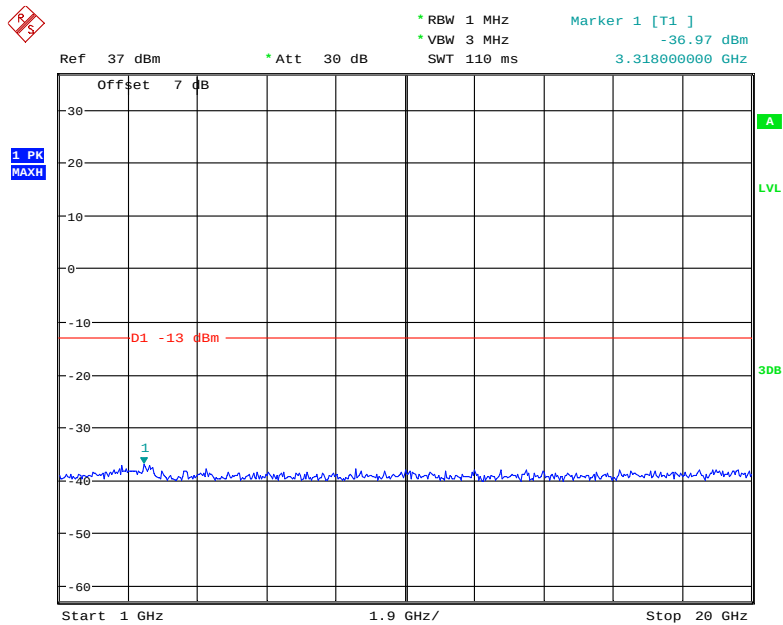
Date: 19.AUG.2021 00:01:58

30 MHz – 1 GHz (WCDMA Mode)



Date: 19.AUG.2021 23:25:57

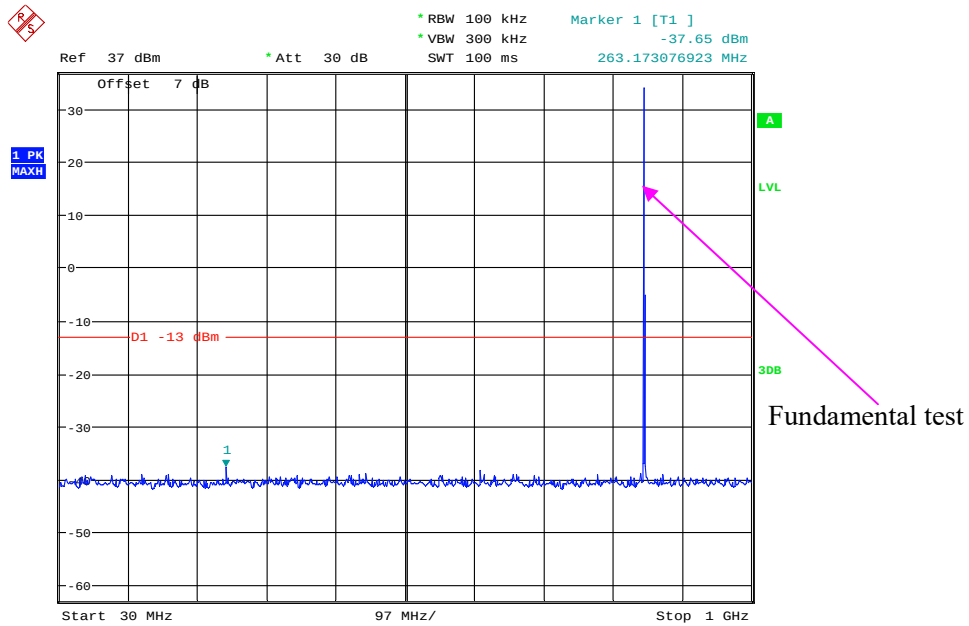
1 GHz – 20 GHz (WCDMA Mode)



Date: 19.AUG.2021 23:13:57

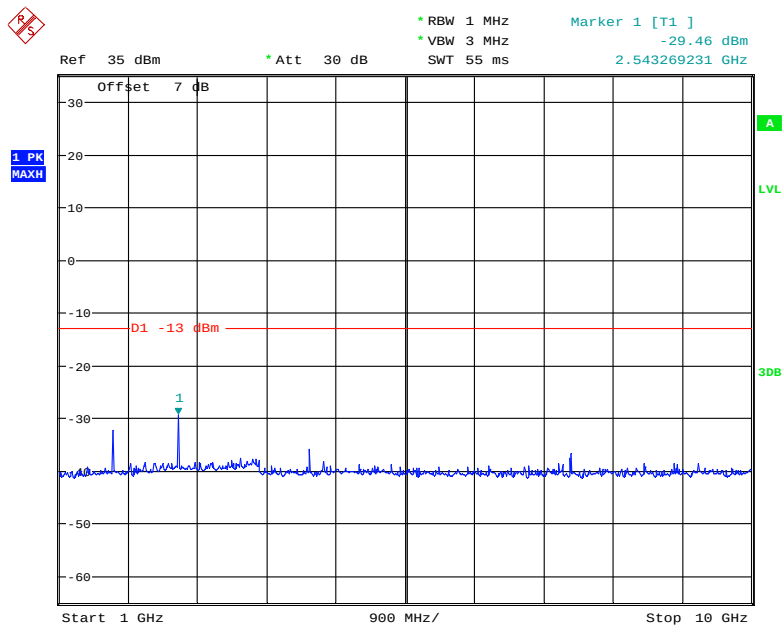
High Channel:

30 MHz – 1 GHz (GSM Mode)

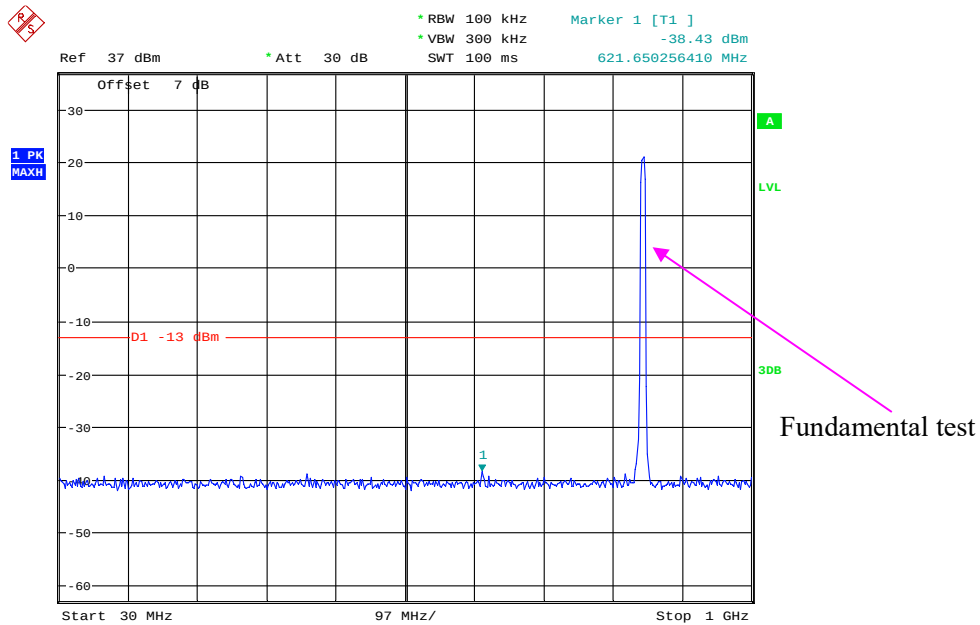


Date: 19.AUG.2021 00:07:43

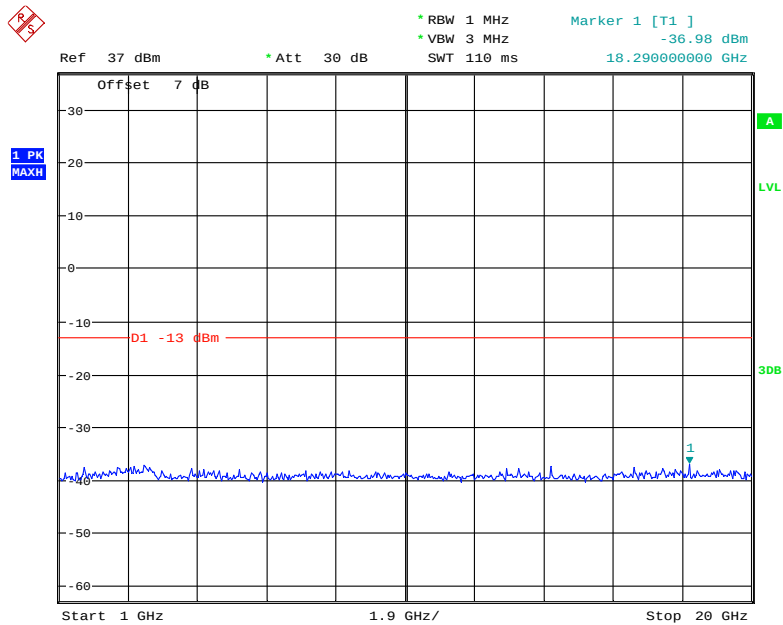
1 GHz – 10 GHz (GSM Mode)



Date: 19.AUG.2021 00:03:00

30 MHz – 1 GHz (WCDMA Mode)

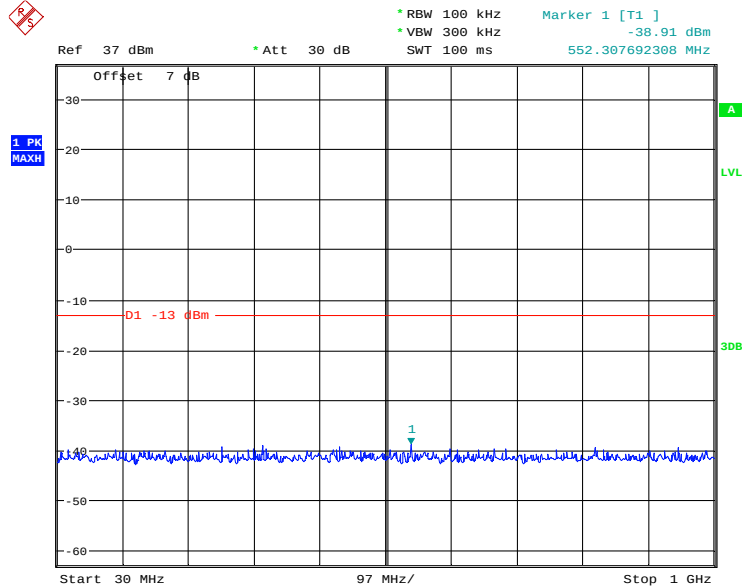
Date: 19.AUG.2021 23:26:33

1 GHz – 2 GHz (WCDMA Mode)

Date: 19.AUG.2021 23:14:52

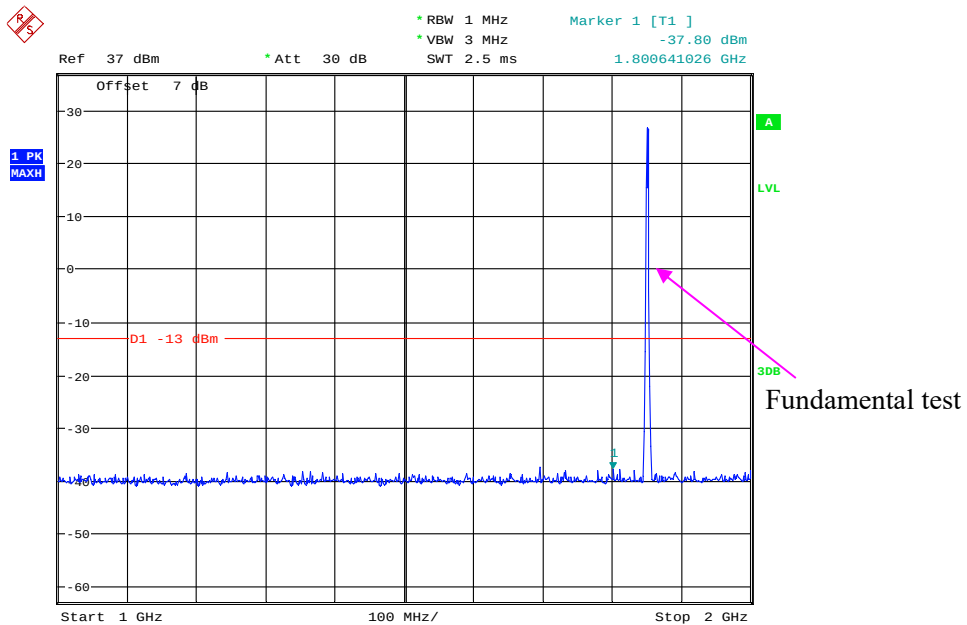
PCS Band (Part 24E)
Low Channel:

30 MHz – 1 GHz (GSM Mode)



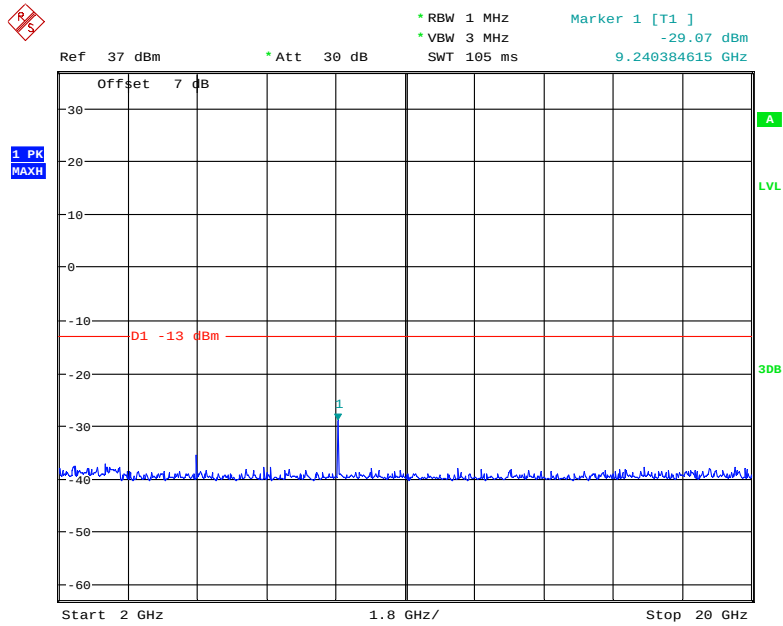
Date: 19.AUG.2021 00:44:40

1 GHz – 2 GHz (GSM Mode)



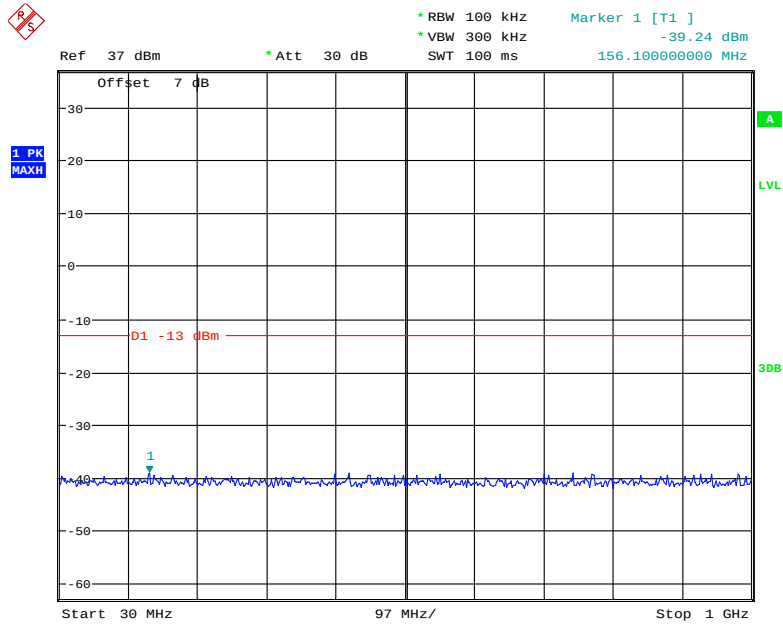
Date: 19.AUG.2021 00:41:43

2 GHz – 20 GHz (GSM Mode)



Date: 19.AUG.2021 00:42:15

30 MHz – 1 GHz (WCDMA Mode)



Date: 19.AUG.2021 23:20:41

Ref 37 dBm Att 30 dB RBW 1 MHz VBW 3 MHz SWT 110 ms Marker 1 [T1] -33.04 dBm 3.693371795 GHz

Offset 7 dB

1 PK MAXH

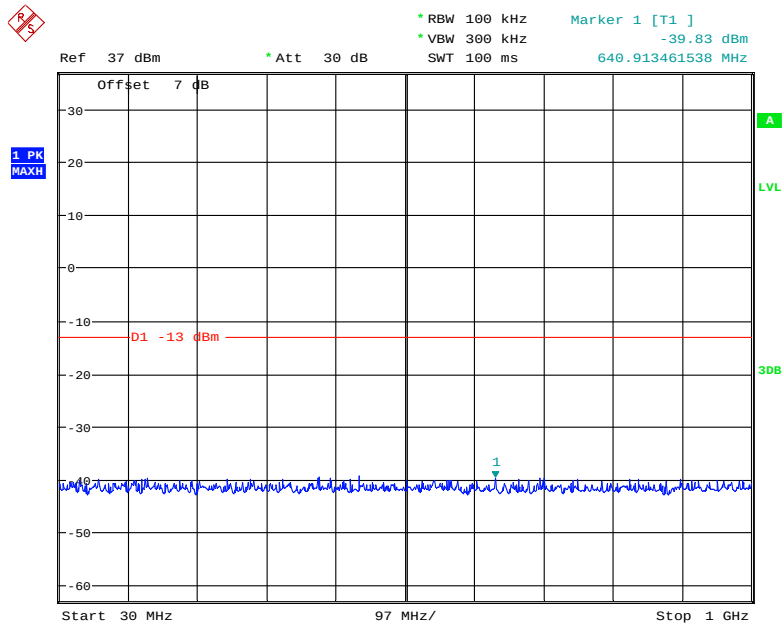
D1 -13 dBm

Start 1 GHz 1.9 GHz/ Stop 20 GHz

Date: 19.AUG.2021 23:18:05

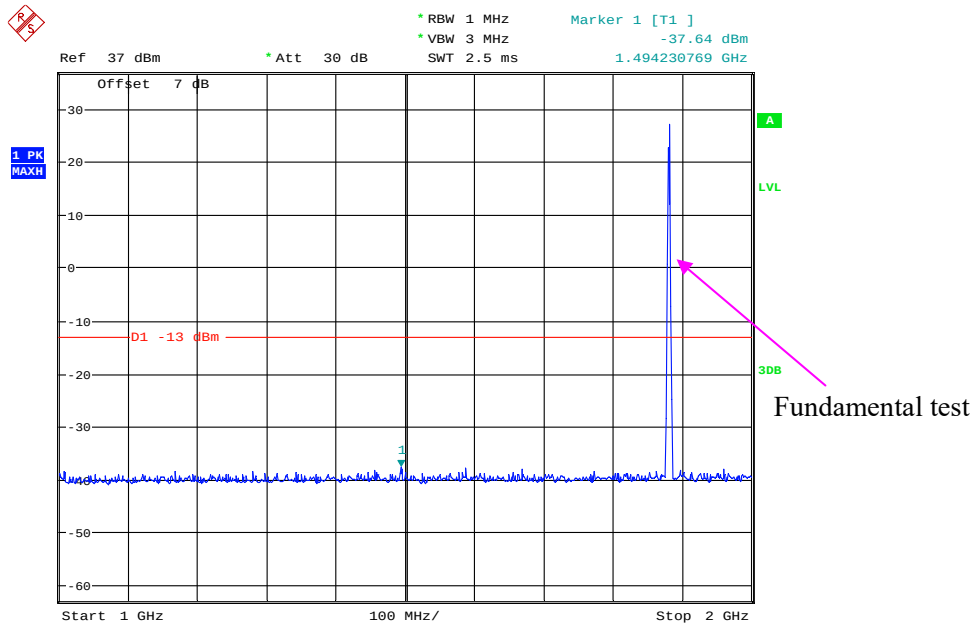
Middle Channel:

30 MHz – 1 GHz (GSM Mode)



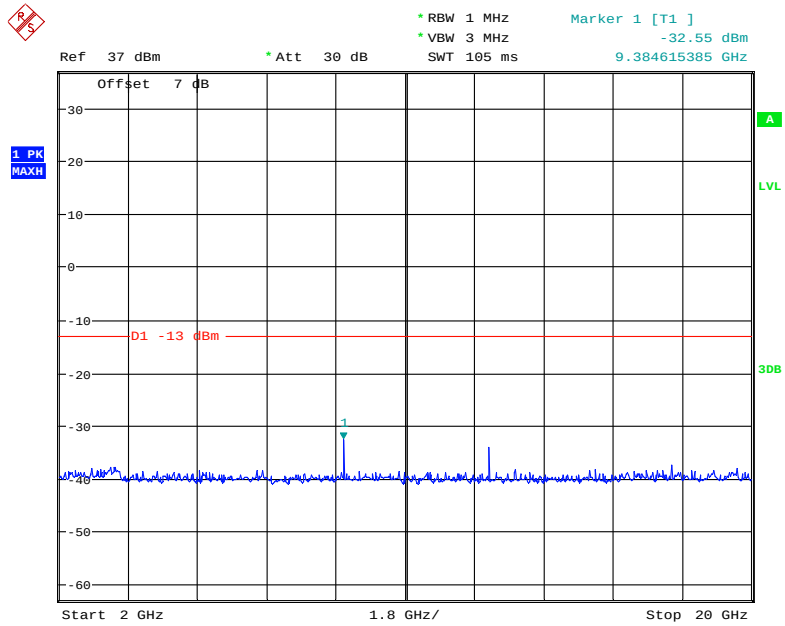
Date: 19.AUG.2021 00:44:17

1 GHz – 2 GHz (GSM Mode)



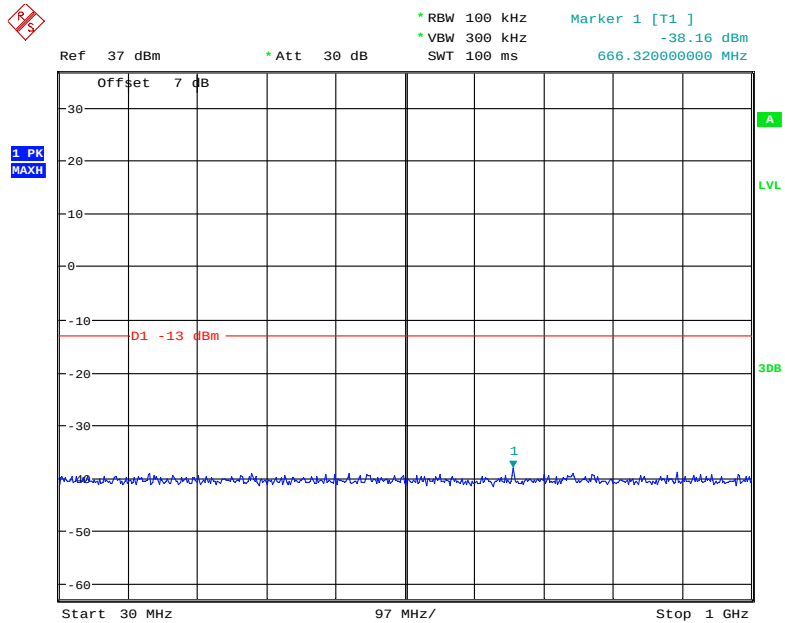
Date: 19.AUG.2021 00:40:56

2 GHz – 20 GHz (GSM Mode)



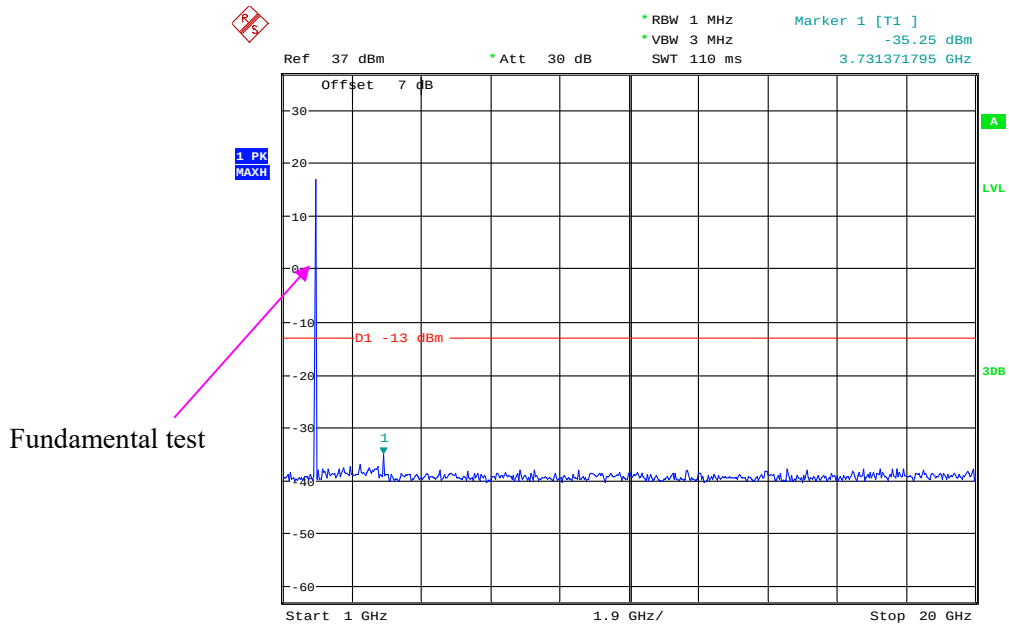
Date: 19.AUG.2021 00:42:37

30 MHz – 1 GHz (WCDMA Mode)



Date: 19.AUG.2021 23:21:02

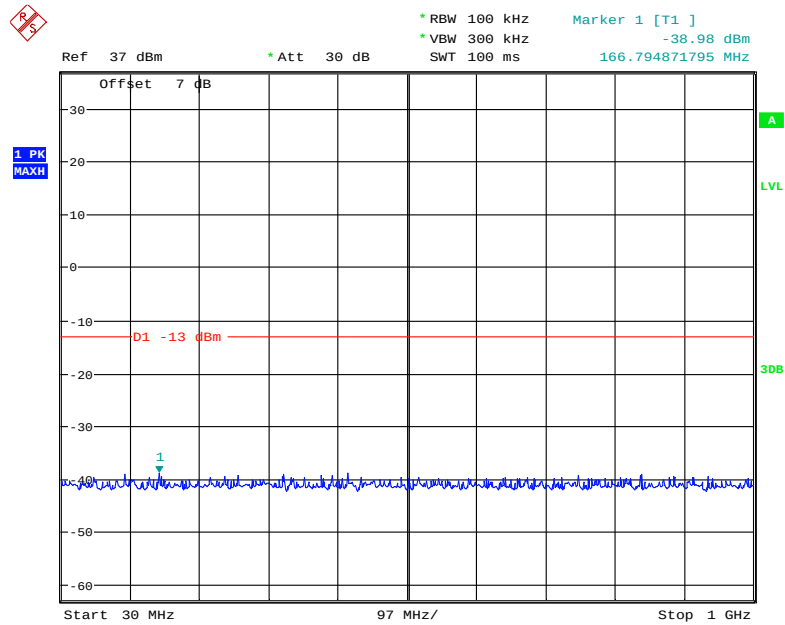
1 GHz – 20 GHz (WCDMA Mode)



Date: 19.AUG.2021 23:18:38

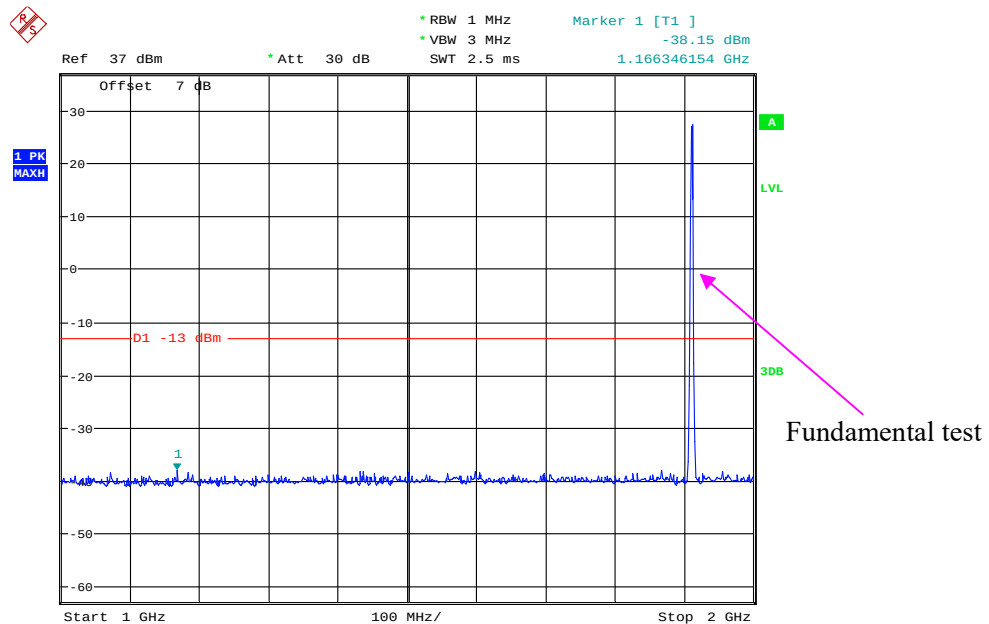
High Channel:

30 MHz – 1 GHz (GSM Mode)



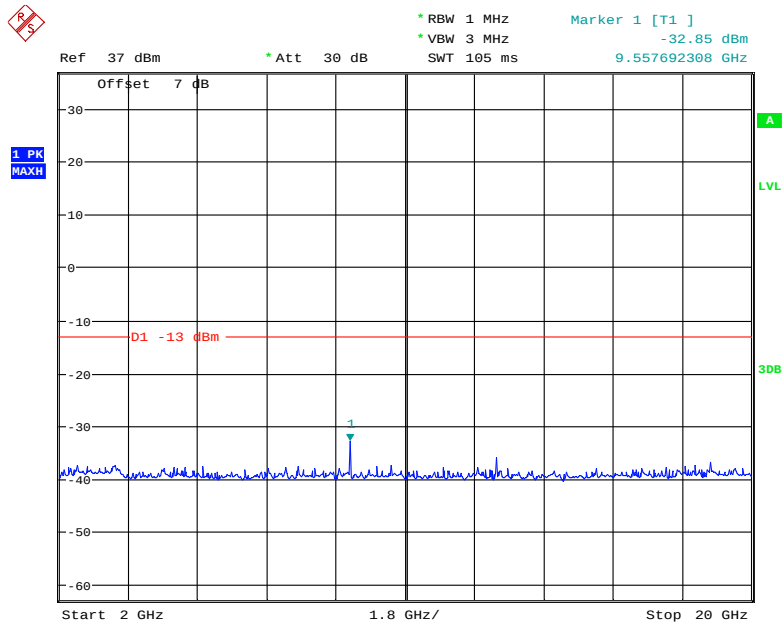
Date: 19.AUG.2021 00:43:54

1 GHz – 2 GHz (GSM Mode)



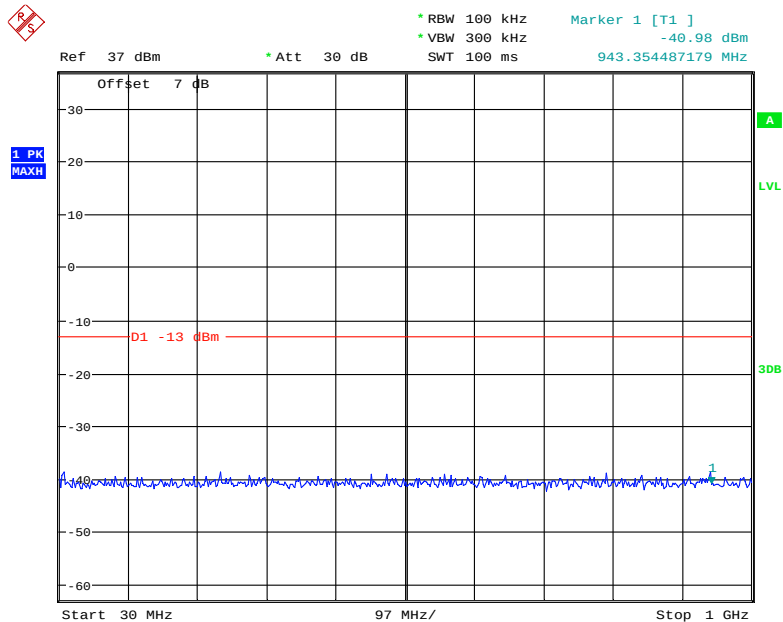
Date: 19.AUG.2021 00:40:00

2 GHz – 20 GHz (GSM Mode)



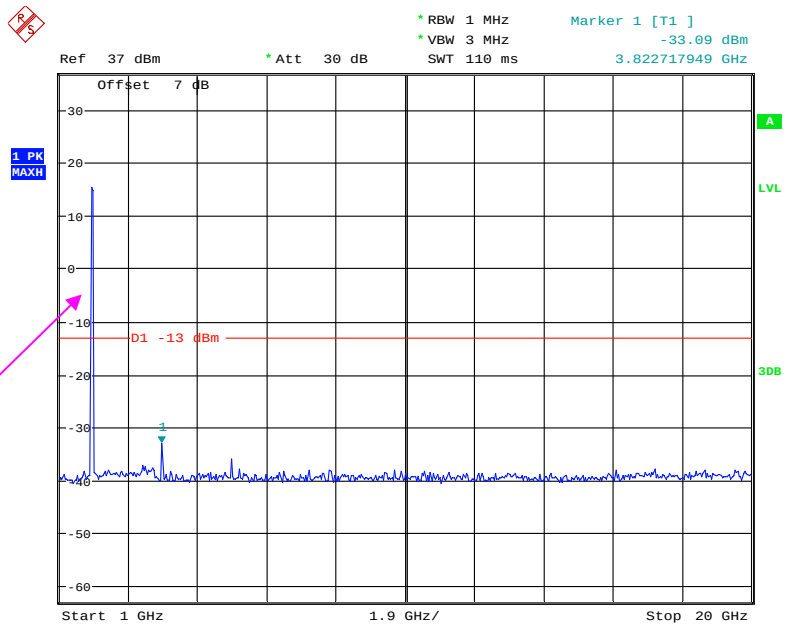
Date: 19.AUG.2021 00:43:16

30 MHz – 1 GHz (WCDMA Mode)



Date: 19.AUG.2021 23:19:51

1 GHz – 20 GHz (WCDMA Mode)

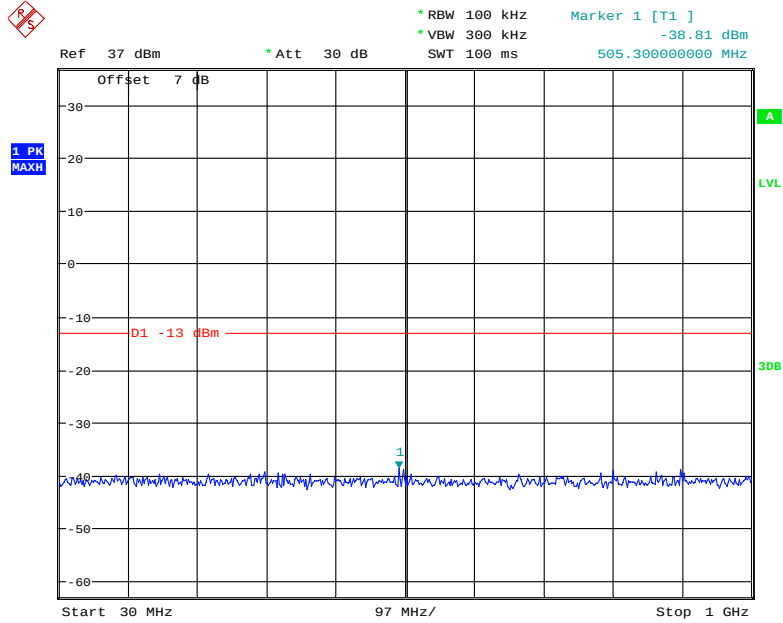


Fundamental test

Date: 19.AUG.2021 23:19:06

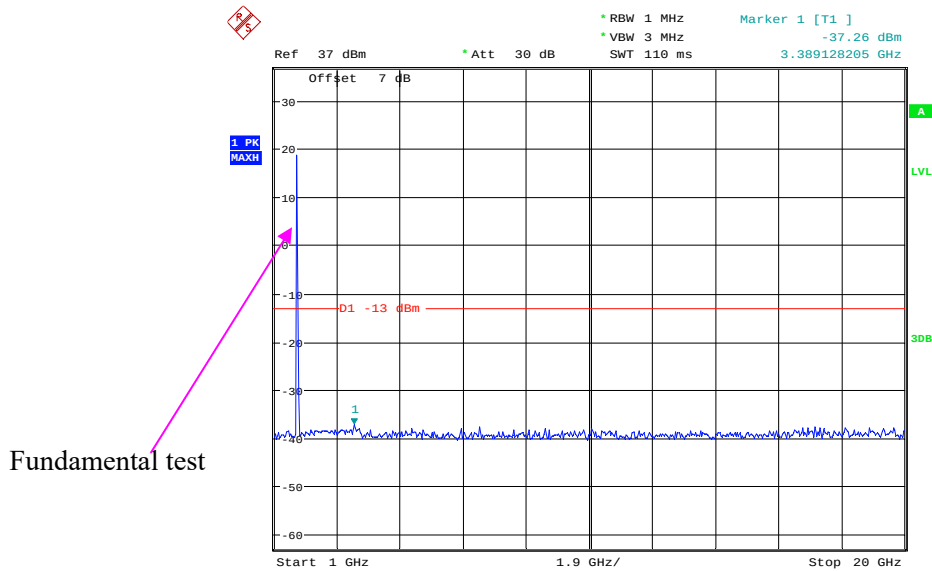
AWS Band (Part 27)
Low Channel:

30 MHz – 1 GHz (WCDMA Mode)



Date: 19.AUG.2021 23:21:36

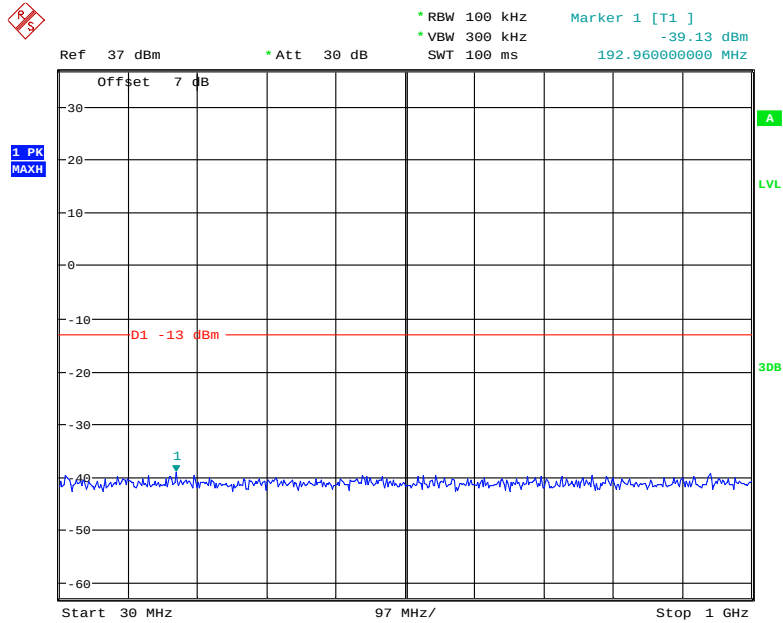
1 GHz – 20 GHz (WCDMA Mode)



Date: 19.AUG.2021 23:17:28

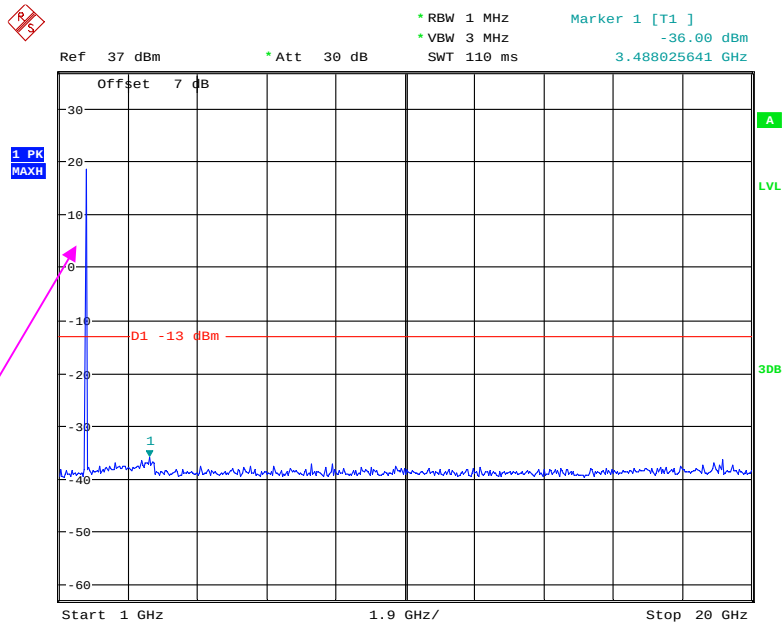
Middle Channel

30 MHz – 1 GHz (WCDMA Mode)



Date: 19.AUG.2021 23:23:06

1 GHz – 20 GHz (WCDMA Mode)

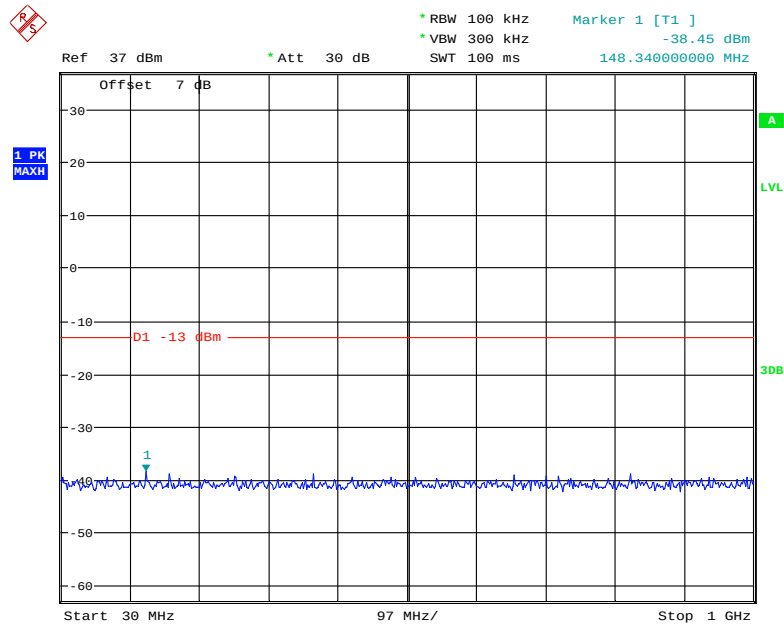


Fundamental test

Date: 19.AUG.2021 23:16:02

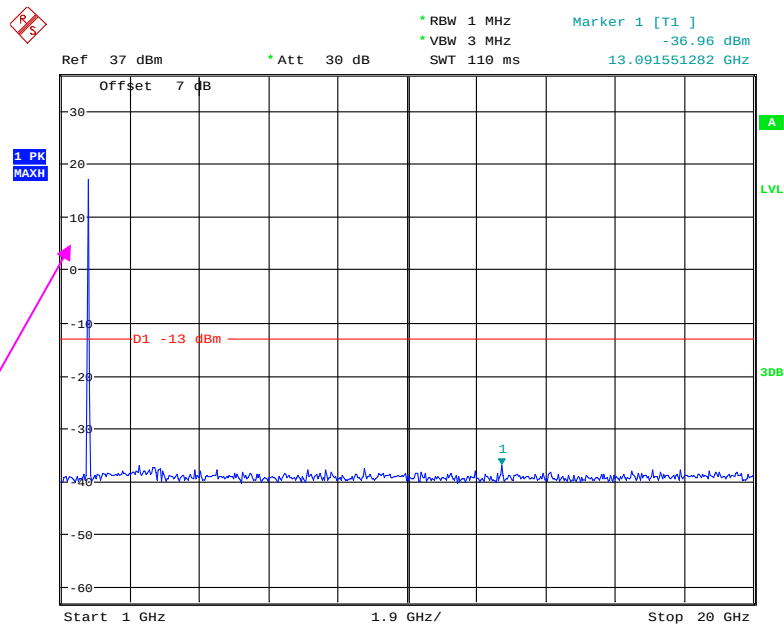
High Channel:

30 MHz – 1 GHz (WCDMA Mode)



Date: 19.AUG.2021 23:23:38

1 GHz – 20 GHz (WCDMA Mode)



Fundamental test

Date: 19.AUG.2021 23:16:52

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) and § 24.238(a) and § 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:	27~ 28.3 °C
Relative Humidity:	46~ 58 %
ATM Pressure:	101.0 kPa

The testing was performed by Cloud Qiu 2021-08-13 for below 1GHz and DioDing on 2021-08-23 for above 1GHz.

EUT operation mode: Transmitting

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

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	FCC Part 22H	
			Height (m)	Polar (H/V)	Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)		Limit (dBm)	Margin (dB)
GSM 850 Mode										
Low channel										
962.3	31.24	356	1.5	H	-65.3	1.36	0.0	-66.66	-13	53.66
962.3	31.95	75	1.9	V	-62.1	1.36	0.0	-63.46	-13	50.46
1648.40	45.28	85	2.2	H	-62.8	1.40	8.70	-55.50	-13	42.50
1648.40	43.98	196	1.4	V	-63.9	1.40	8.70	-56.60	-13	43.60
2472.60	50.24	15	1.7	H	-53.1	2.60	10.20	-45.50	-13	32.50
2472.60	49.63	300	2.4	V	-53.1	2.60	10.20	-45.50	-13	32.50
3296.80	43.25	262	2.3	H	-57.6	1.50	11.70	-47.40	-13	34.40
3296.80	43.61	61	1.5	V	-57.3	1.50	11.70	-47.10	-13	34.10
Middle channel										
961.6	31.21	139	1.8	H	-65.3	1.36	0.0	-66.66	-13	53.66
961.6	32.05	16	2.4	V	-62.0	1.36	0.0	-63.36	-13	50.36
1673.20	44.51	213	2.1	H	-61.8	1.30	8.90	-54.20	-13	41.20
1673.20	44.76	151	2.3	V	-61.0	1.30	8.90	-53.40	-13	40.40
2509.80	49.51	263	1.4	H	-53.8	2.60	10.20	-46.20	-13	33.20
2509.80	48.36	45	1.2	V	-54.4	2.60	10.20	-46.80	-13	33.80
3346.40	43.28	163	2.0	H	-57.6	1.50	11.70	-47.40	-13	34.40
3346.40	43.33	186	1.1	V	-57.6	1.50	11.70	-47.40	-13	34.40
High Channel										
962.8	31.38	268	1.8	H	-65.1	1.36	0.0	-66.46	-13	53.46
962.8	32.17	58	2.1	V	-61.9	1.36	0.0	-63.26	-13	50.26
1697.60	44.12	159	1.9	H	-62.2	1.30	8.90	-54.60	-13	41.60
1697.60	44.24	233	1.7	V	-61.5	1.30	8.90	-53.90	-13	40.90
2546.40	48.96	65	1.5	H	-54.4	2.60	10.20	-46.80	-13	33.80
2546.40	48.55	33	1.6	V	-54.2	2.60	10.20	-46.60	-13	33.60
3395.20	43.84	299	1.7	H	-57.4	1.40	11.80	-47.00	-13	34.00
3395.20	43.71	199	2.1	V	-57.3	1.40	11.80	-46.90	-13	33.90

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	FCC Part 22H	
			Height (m)	Polar (H/V)	Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)		Limit (dBm)	Margin (dB)
WCDMA Mode										
Low channel										
962.3	31.29	300	2.4	H	-65.2	1.36	0.0	-66.56	-13	53.56
962.3	32.31	81	1.1	V	-61.7	1.36	0.0	-63.06	-13	50.06
1652.80	51.94	325	2.2	H	-54.4	1.30	8.90	-46.80	-13	33.80
1652.80	48.27	336	2.4	V	-57.5	1.30	8.90	-49.90	-13	36.90
2479.20	47.89	243	1.7	H	-55.5	2.60	10.20	-47.90	-13	34.90
2479.20	49.77	294	2.2	V	-53.0	2.60	10.20	-45.40	-13	32.40
Middle channel										
961.6	31.16	239	1.1	H	-65.3	1.36	0.0	-66.66	-13	53.66
961.6	32.28	349	2.2	V	-61.8	1.36	0.0	-63.16	-13	50.16
1673.20	52.12	237	1.7	H	-54.2	1.30	8.90	-46.60	-13	33.60
1673.20	48.79	113	1.5	V	-56.9	1.30	8.90	-49.30	-13	36.30
2509.80	48.53	268	1.5	H	-54.8	2.60	10.20	-47.20	-13	34.20
2509.80	49.87	25	1.9	V	-52.9	2.60	10.20	-45.30	-13	32.30
High channel										
963.8	31.11	175	2.4	H	-65.4	1.36	0.0	-66.76	-13	53.76
963.8	32.25	306	2.1	V	-61.8	1.36	0.0	-63.16	-13	50.16
1693.20	53.36	316	1.3	H	-53.0	1.30	8.90	-45.40	-13	32.40
1693.20	49.14	182	1.9	V	-56.6	1.30	8.90	-49.00	-13	36.00
2539.80	48.82	76	2.0	H	-54.5	2.60	10.20	-46.90	-13	33.90
2539.80	50.13	158	2.2	V	-52.6	2.60	10.20	-45.00	-13	32.00

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

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	FCC Part 22E	
			Height (m)	Polar (H/V)	Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)		Limit (dBm)	Margin (dB)
PCS 1900 Mode										
Low channel										
962.1	31.33	21	2.0	H	-65.2	1.36	0.0	-66.56	-13	53.56
962.1	32.08	340	1.7	V	-62.0	1.36	0.0	-63.36	-13	50.36
3700.40	44.17	115	1.7	H	-57.6	1.60	11.90	-47.30	-13	34.30
3700.40	44.24	72	1.3	V	-57.0	1.60	11.90	-46.70	-13	33.70
Middle channel										
963.2	31.31	133	1.7	H	-65.2	1.36	0.0	-66.56	-13	53.56
963.2	32.13	26	2.2	V	-61.9	1.36	0.0	-63.26	-13	50.26
3760.00	44.49	39	1.8	H	-57.6	1.50	11.80	-47.30	-13	34.30
3760.00	44.24	255	1.5	V	-57.3	1.50	11.80	-47.00	-13	34.00
High channel										
963.3	31.28	178	2.5	H	-65.2	1.36	0.0	-66.56	-13	53.56
963.3	32.19	121	1.0	V	-61.9	1.36	0.0	-63.26	-13	50.26
3819.60	44.21	206	1.8	H	-57.8	1.50	11.80	-47.50	-13	34.50
3819.60	44.24	107	1.3	V	-57.3	1.50	11.80	-47.00	-13	34.00

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	FCC Part 22E	
			Height (m)	Polar (H/V)	Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)		Limit (dBm)	Margin (dB)
WCDMA Mode										
Low channel										
966.8	31.18	220	1.0	H	-65.3	1.36	0.0	-66.66	-13	53.66
966.8	32.22	39	1.5	V	-61.8	1.36	0.0	-63.16	-13	50.16
3704.80	54.16	74	1.5	H	-47.6	1.60	11.90	-37.30	-13	24.30
3704.80	56.42	7	1.2	V	-44.8	1.60	11.90	-34.50	-13	21.50
5557.20	49.15	208	1.4	H	-50.5	1.70	12.40	-39.80	-13	26.80
5557.20	50.97	88	1.4	V	-48.4	1.70	12.40	-37.70	-13	24.70
7409.60	44.14	104	1.5	H	-52.3	2.10	10.60	-43.80	-13	30.80
7409.60	45.07	324	1.1	V	-51.9	2.10	10.60	-43.40	-13	30.40
Middle channel										
964.7	31.02	233	2.4	H	-65.5	1.36	0.0	-66.86	-13	53.86
964.7	32.25	301	1.3	V	-61.8	1.36	0.0	-63.16	-13	50.16
3760.00	53.33	200	1.9	H	-48.7	1.50	11.80	-38.40	-13	25.40
3760.00	56.01	345	1.4	V	-45.6	1.50	11.80	-35.30	-13	22.30
5640.00	48.82	218	2.4	H	-50.9	1.70	12.40	-40.20	-13	27.20
5640.00	50.64	211	2.4	V	-48.7	1.70	12.40	-38.00	-13	25.00
7520.00	44.01	79	1.4	H	-51.9	1.90	10.70	-43.10	-13	30.10
7520.00	44.69	321	1.9	V	-50.8	1.90	10.70	-42.00	-13	29.00
High channel										
961.9	31.14	255	1.1	H	-65.4	1.36	0.0	-66.76	-13	53.76
961.9	32.09	174	1.4	V	-62.0	1.36	0.0	-63.36	-13	50.36
3815.20	55.27	76	2.1	H	-46.8	1.50	11.80	-36.50	-13	23.50
3815.20	57.64	237	2.2	V	-43.9	1.50	11.80	-33.60	-13	20.60
5722.80	49.25	331	2.1	H	-50.6	1.60	12.10	-40.10	-13	27.10
5722.80	51.47	343	1.1	V	-47.8	1.60	12.10	-37.30	-13	24.30
7630.40	45.35	358	1.0	H	-52.2	2.10	10.50	-43.80	-13	30.80
7630.40	45.92	326	1.8	V	-51.4	2.10	10.50	-43.00	-13	30.00

30 MHz ~ 20 GHz:**AWS Band**

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	FCC Part 27	
			Height (m)	Polar (H/V)	Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)		Limit (dBm)	Margin (dB)
WCDMA Mode										
Low channel										
962.3	31.09	225	1.9	H	-65.4	1.36	0.0	-66.76	-13	53.76
962.3	32.12	57	2.3	V	-61.9	1.36	0.0	-63.26	-13	50.26
3424.80	44.06	188	2.0	H	-56.7	1.40	11.80	-46.30	-13	33.30
3424.80	44.84	328	1.9	V	-55.8	1.40	11.80	-45.40	-13	32.40
5137.20	46.48	291	1.2	H	-53.5	1.60	12.10	-43.00	-13	30.00
5137.20	49.15	67	1.6	V	-50.9	1.60	12.10	-40.40	-13	27.40
Middle channel										
961.2	31.23	166	1.2	H	-65.3	1.36	0.0	-66.66	-13	53.66
961.2	32.18	28	1.8	V	-61.9	1.36	0.0	-63.26	-13	50.26
3465.20	44.01	200	2.3	H	-56.7	1.50	12.00	-46.20	-13	33.20
3465.20	44.35	345	1.8	V	-57.2	1.50	12.00	-46.70	-13	33.70
5197.80	45.07	71	2.3	H	-55.0	1.60	12.10	-44.50	-13	31.50
5197.80	48.96	321	1.4	V	-50.7	1.60	12.10	-40.20	-13	27.20
High channel										
964.8	31.05	149	1.4	H	-65.5	1.36	0.0	-66.86	-13	53.86
964.8	32.16	245	1.4	V	-61.9	1.36	0.0	-63.26	-13	50.26
3505.20	44.88	347	1.2	H	-55.9	1.50	12.00	-45.40	-13	32.40
3505.20	45.13	292	1.7	V	-56.4	1.50	12.00	-45.90	-13	32.90
5257.80	45.94	101	1.9	H	-53.8	1.60	12.20	-43.20	-13	30.20
5257.80	49.29	55	1.7	V	-49.9	1.60	12.20	-39.30	-13	26.30

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

Frequency	Receiver	Turntable	Rx Antenna		Substituted			Absolute Level	Limit	Margin
(MHz)	Reading (dBμV)	Angle Degree	Height (m)	Polar (H/V)	Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)	(dBm)	(dBm)	(dB)
Band 2										
Test frequency range: 30 MHz ~ 20 GHz										
1.4MHz, Low channel										
961.9	31.03	222	2.4	H	-65.5	1.36	0.0	-66.86	-13	53.86
961.9	32.24	166	2.0	V	-61.8	1.36	0.0	-63.16	-13	50.16
3701.40	53.19	326	1.6	H	-48.6	1.60	11.90	-38.30	-13	25.30
3701.40	60.11	67	1.5	V	-41.1	1.60	11.90	-30.80	-13	17.80
5552.10	56.37	218	1.5	H	-43.3	1.70	12.40	-32.60	-13	19.60
5552.10	58.06	179	1.8	V	-41.3	1.70	12.40	-30.60	-13	17.60
7402.80	49.37	127	1.7	H	-47.1	2.10	10.60	-38.60	-13	25.60
7402.80	49.60	71	1.9	V	-47.4	2.10	10.60	-38.90	-13	25.90
9253.50	47.23	244	2.4	H	-50.5	2.20	11.80	-40.90	-13	27.90
9253.50	45.01	197	1.2	V	-53.2	2.20	11.80	-43.60	-13	30.60
1.4 MHz, Middle channel										
961.7	31.08	291	1.7	H	-65.4	1.36	0.0	-66.76	-13	53.76
961.7	32.21	336	1.8	V	-61.8	1.36	0.0	-63.16	-13	50.16
3760.00	54.05	325	2.4	H	-48.0	1.50	11.80	-37.70	-13	24.70
3760.00	59.78	249	1.0	V	-41.8	1.50	11.80	-31.50	-13	18.50
5640.00	55.94	32	2.4	H	-43.7	1.70	12.40	-33.00	-13	20.00
5640.00	59.18	327	2.1	V	-40.2	1.70	12.40	-29.50	-13	16.50
7520.00	46.01	156	1.8	H	-49.9	1.90	10.70	-41.10	-13	28.10
7520.00	50.86	341	1.4	V	-44.7	1.90	10.70	-35.90	-13	22.90
9400.00	46.93	175	1.9	H	-49.9	2.20	11.50	-40.60	-13	27.60
9400.00	45.54	94	2.1	V	-51.5	2.20	11.50	-42.20	-13	29.20
1.4MHz, High channel										
969.1	31.05	129	2.5	H	-65.5	1.36	0.0	-66.86	-13	53.86
969.1	32.12	248	1.8	V	-61.9	1.36	0.0	-63.26	-13	50.26
3818.60	52.78	245	1.4	H	-49.3	1.50	11.80	-39.00	-13	26.00
3818.60	58.30	339	1.1	V	-43.3	1.50	11.80	-33.00	-13	20.00
5727.90	59.50	266	1.7	H	-40.4	1.60	12.10	-29.90	-13	16.90
5727.90	56.33	165	1.0	V	-42.9	1.60	12.10	-32.40	-13	19.40
7637.20	46.99	186	2.1	H	-50.5	2.10	10.50	-42.10	-13	29.10
7637.20	51.02	172	2.5	V	-46.3	2.10	10.50	-37.90	-13	24.90
9546.50	47.33	280	1.8	H	-49.5	2.20	11.50	-40.20	-13	27.20
9546.50	44.80	315	1.8	V	-52.3	2.20	11.50	-43.00	-13	30.00

Frequency	Receiver	Turntable	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
(MHz)	Reading (dBμV)	Angle Degree	Height (m)	Polar (H/V)	Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
Band 4										
Test frequency range:30 MHz ~ 20 GHz										
1.4 MHz, Low channel										
963.9	31.15	33	1.8	H	-65.4	1.36	0.0	-66.76	-13	53.76
963.9	32.29	4	1.6	V	-61.8	1.36	0.0	-63.16	-13	50.16
3421.40	44.12	227	2.4	H	-56.7	1.40	11.80	-46.30	-13	33.30
3421.40	43.89	5	1.1	V	-56.7	1.40	11.80	-46.30	-13	33.30
5132.10	51.57	344	1.9	H	-48.4	1.60	12.10	-37.90	-13	24.90
5132.10	57.68	118	1.5	V	-42.3	1.60	12.10	-31.80	-13	18.80
6842.80	46.28	64	1.5	H	-52.4	1.80	11.20	-43.00	-13	30.00
6842.80	47.36	203	1.4	V	-51.8	1.80	11.20	-42.40	-13	29.40
8553.50	52.76	272	2.3	H	-45.2	2.10	11.40	-35.90	-13	22.90
8553.50	46.35	199	2.4	V	-51.7	2.10	11.40	-42.40	-13	29.40
1.4MHz, Middle channel										
968.6	31.19	345	1.3	H	-65.3	1.36	0.0	-66.66	-13	53.66
968.6	32.27	182	1.7	V	-61.8	1.36	0.0	-63.16	-13	50.16
3465.00	44.36	301	1.8	H	-56.4	1.50	12.00	-45.90	-13	32.90
3465.00	44.01	168	1.5	V	-57.5	1.50	12.00	-47.00	-13	34.00
5197.50	50.01	42	1.5	H	-50.1	1.60	12.10	-39.60	-13	26.60
5197.50	56.96	108	2.1	V	-42.7	1.60	12.10	-32.20	-13	19.20
6930.00	45.13	186	1.8	H	-53.2	1.80	11.30	-43.70	-13	30.70
6930.00	45.51	322	1.1	V	-53.0	1.80	11.30	-43.50	-13	30.50
8662.50	52.35	316	2.3	H	-45.7	2.10	11.40	-36.40	-13	23.40
8662.50	45.53	167	1.2	V	-52.6	2.10	11.40	-43.30	-13	30.30
1.4MHz, High channel										
969.7	31.23	300	1.8	H	-65.3	1.36	0.0	-66.66	-13	53.66
969.7	32.22	194	2.1	V	-61.8	1.36	0.0	-63.16	-13	50.16
3508.60	44.82	356	2.1	H	-55.9	1.50	12.00	-45.40	-13	32.40
3508.60	44.26	33	1.6	V	-57.2	1.50	12.00	-46.70	-13	33.70
5262.90	52.64	256	1.0	H	-47.1	1.60	12.20	-36.50	-13	23.50
5262.90	57.38	238	1.4	V	-41.8	1.60	12.20	-31.20	-13	18.20
7017.20	46.77	89	2.4	H	-52.0	1.90	11.20	-42.70	-13	29.70
7017.20	48.06	279	2.3	V	-50.9	1.90	11.20	-41.60	-13	28.60
8771.50	53.41	136	1.6	H	-44.0	2.10	11.60	-34.50	-13	21.50
8771.50	46.73	313	1.2	V	-50.1	2.10	11.60	-40.60	-13	27.60

Frequency	Receiver	Turntable	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
(MHz)	Reading (dBμV)	Angle Degree	Height (m)	Polar (H/V)	Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
Band 5										
Test frequency range:30 MHz ~ 10 GHz										
1.4MHz, Low channel										
966.8	31.14	187	1.5	H	-65.4	1.36	0.0	-66.76	-13	53.76
966.8	32.26	313	2.0	V	-61.8	1.36	0.0	-63.16	-13	50.16
1649.40	54.35	95	1.0	H	-53.7	1.40	8.70	-46.40	-13	33.40
1649.40	49.89	30	1.2	V	-58.0	1.40	8.70	-50.70	-13	37.70
2474.10	50.77	126	1.2	H	-52.6	2.60	10.20	-45.00	-13	32.00
2474.10	49.16	75	1.7	V	-53.6	2.60	10.20	-46.00	-13	33.00
3298.80	45.61	24	1.5	H	-55.3	1.50	11.70	-45.10	-13	32.10
3298.80	44.39	240	1.7	V	-56.5	1.50	11.70	-46.30	-13	33.30
4123.50	45.08	125	2.1	H	-57.1	1.40	12.20	-46.30	-13	33.30
4123.50	46.17	316	2.4	V	-54.9	1.40	12.20	-44.10	-13	31.10
4948.20	55.84	204	1.1	H	-44.3	1.60	12.10	-33.80	-13	20.80
4948.20	54.62	52	1.1	V	-45.8	1.60	12.10	-35.30	-13	22.30
5772.90	48.51	235	1.3	H	-47.4	1.70	12.10	-37.00	-13	24.00
5772.90	46.19	359	1.1	V	-49.2	1.70	12.10	-38.80	-13	25.80
1.4MHz, Middle channel										
964.7	31.28	170	1.9	H	-65.2	1.36	0.0	-66.56	-13	53.56
964.7	32.16	126	1.2	V	-61.9	1.36	0.0	-63.26	-13	50.26
1673.00	54.63	301	2.4	H	-51.7	1.30	8.90	-44.10	-13	31.10
1673.00	50.85	246	1.6	V	-54.9	1.30	8.90	-47.30	-13	34.30
2509.50	50.98	16	1.6	H	-52.4	2.60	10.20	-44.80	-13	31.80
2509.50	49.18	292	1.9	V	-53.6	2.60	10.20	-46.00	-13	33.00
3346.00	45.36	345	2.3	H	-55.5	1.50	11.70	-45.30	-13	32.30
3346.00	44.27	199	1.6	V	-56.7	1.50	11.70	-46.50	-13	33.50
4182.50	44.25	76	2.5	H	-57.7	1.50	11.80	-47.40	-13	34.40
4182.50	45.90	112	1.3	V	-55.3	1.50	11.80	-45.00	-13	32.00
5019.00	55.21	6	1.8	H	-43.6	1.70	12.00	-33.30	-13	20.30
5019.00	54.73	248	2.2	V	-43.5	1.70	12.00	-33.20	-13	20.20
5855.50	48.93	213	2.2	H	-46.9	1.70	12.20	-36.40	-13	23.40
5855.50	45.71	128	1.9	V	-49.5	1.70	12.20	-39.00	-13	26.00
1.4MHz, High channel										
961.2	31.21	342	1.9	H	-65.3	1.36	0.0	-66.66	-13	53.66
961.2	32.19	284	1.4	V	-61.9	1.36	0.0	-63.26	-13	50.26
1696.60	56.43	70	1.9	H	-49.9	1.30	8.90	-42.30	-13	29.30
1696.60	50.88	313	2.3	V	-54.9	1.30	8.90	-47.30	-13	34.30
2544.90	51.65	246	1.5	H	-51.7	2.60	10.20	-44.10	-13	31.10
2544.90	49.86	348	1.7	V	-52.9	2.60	10.20	-45.30	-13	32.30
3393.20	46.72	339	2.3	H	-54.5	1.40	11.80	-44.10	-13	31.10
3393.20	45.28	242	1.2	V	-55.8	1.40	11.80	-45.40	-13	32.40
4241.50	46.15	61	2.1	H	-55.8	1.50	11.80	-45.50	-13	32.50
4241.50	46.92	18	2.3	V	-54.2	1.50	11.80	-43.90	-13	30.90
5089.80	56.16	20	2.2	H	-41.5	1.60	12.10	-31.00	-13	18.00
5089.80	55.21	58	1.5	V	-42.4	1.60	12.10	-31.90	-13	18.90
5938.10	49.58	272	1.4	H	-46.2	1.70	12.20	-35.70	-13	22.70
5938.10	47.24	43	2.3	V	-47.9	1.70	12.20	-37.40	-13	24.40

Frequency	Receiver	Turntable	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
(MHz)	Reading (dBμV)	Angle Degree	Height (m)	Polar (H/V)	Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
Band 7										
Test frequency range: 30 MHz ~ 26.5 GHz										
5MHz, Low channel										
967.3	31.01	62	1.2	H	-65.5	1.36	0.0	-66.86	-25	41.86
967.3	32.31	331	1.4	V	-61.7	1.36	0.0	-63.06	-25	38.06
5005.00	45.83	344	1.9	H	-54.8	1.70	12.00	-44.50	-25	19.50
5005.00	44.75	6	1.6	V	-55.3	1.70	12.00	-45.00	-25	20.00
5MHz, Middle channel										
967.6	31.04	320	2.0	H	-65.5	1.36	0.0	-66.86	-25	41.86
967.6	32.24	7	2.2	V	-61.8	1.36	0.0	-63.16	-25	38.16
5070.00	44.81	270	1.1	H	-55.2	1.60	12.10	-44.70	-25	19.70
5070.00	44.01	316	1.2	V	-56.0	1.60	12.10	-45.50	-25	20.50
5 MHz, High channel										
966.1	31.15	29	2.4	H	-65.4	1.36	0.0	-66.76	-25	41.76
966.1	32.03	202	1.6	V	-62.0	1.36	0.0	-63.36	-25	38.36
5135.00	46.21	284	1.9	H	-53.8	1.60	12.10	-43.30	-25	18.30
5135.00	45.48	66	1.8	V	-54.5	1.60	12.10	-44.00	-25	19.00

Frequency	Receiver	Turntable	Rx Antenna		Substituted			Absolute Level	Limit	Margin
(MHz)	Reading (dBμV)	Angle Degree	Height (m)	Polar (H/V)	Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)	(dBm)	(dBm)	(dB)
Band 38										
Test frequency range: 30 MHz ~26.5 GHz										
5MHz, Low channel										
962.3	31.12	48	2.2	H	-65.4	1.36	0.0	-66.76	-25	41.76
962.3	32.06	147	1.2	V	-62.0	1.36	0.0	-63.36	-25	38.36
5145.00	50.13	244	2.2	H	-49.9	1.60	12.10	-39.40	-25	14.40
5145.00	51.75	358	1.5	V	-48.3	1.60	12.10	-37.80	-25	12.80
7717.50	54.88	20	2.2	H	-42.6	2.10	10.50	-34.20	-25	9.20
7717.50	56.09	337	1.7	V	-41.2	2.10	10.50	-32.80	-25	7.80
10290.0	55.64	116	2.1	H	-40.8	2.60	10.60	-32.80	-25	7.80
10290.0	52.06	259	2.1	V	-43.6	2.60	10.60	-35.60	-25	10.60
12862.5	48.54	238	2.0	H	-49.8	2.70	12.60	-39.90	-25	14.90
12862.5	45.77	332	1.6	V	-54.1	2.70	12.60	-44.20	-25	19.20
15435.0	45.95	352	1.3	H	-51.2	2.70	12.40	-41.50	-25	16.50
15435.0	45.04	52	2.0	V	-53.5	2.70	12.40	-43.80	-25	18.80
5 MHz, Middle channel										
969.3	31.22	340	1.3	H	-65.3	1.36	0.0	-66.66	-25	41.66
969.3	32.16	61	2.2	V	-61.9	1.36	0.0	-63.26	-25	38.26
5190.00	50.08	98	1.1	H	-50.0	1.60	12.10	-39.50	-25	14.50
5190.00	51.49	155	2.3	V	-48.1	1.60	12.10	-37.60	-25	12.60
7785.00	55.06	200	1.6	H	-41.2	2.00	10.50	-32.70	-25	7.70
7785.00	58.04	290	1.4	V	-38.1	2.00	10.50	-29.60	-25	4.60
10380.0	54.79	96	2.0	H	-40.7	2.60	10.50	-32.80	-25	7.80
10380.0	51.92	351	1.3	V	-44.1	2.60	10.50	-36.20	-25	11.20
12975.0	47.30	67	2.3	H	-49.8	2.70	12.70	-39.80	-25	14.80
12975.0	46.13	164	1.2	V	-51.2	2.70	12.70	-41.20	-25	16.20
15570.0	46.06	247	1.6	H	-50.0	2.60	15.40	-37.20	-25	12.20
15570.0	44.56	85	1.1	V	-52.6	2.60	15.40	-39.80	-25	14.80
5MHz, High channel										
960.8	31.08	47	1.3	H	-65.4	1.36	0.0	-66.76	-25	41.76
960.8	32.27	256	1.4	V	-61.8	1.36	0.0	-63.16	-25	38.16
5235.00	51.14	333	1.7	H	-49.0	1.60	12.10	-38.50	-25	13.50
5235.00	50.73	139	1.5	V	-48.9	1.60	12.10	-38.40	-25	13.40
7852.50	55.42	46	2.1	H	-40.8	2.00	10.50	-32.30	-25	7.30
7852.50	56.08	9	1.2	V	-40.1	2.00	10.50	-31.60	-25	6.60
10470.0	56.28	4	1.6	H	-39.2	2.60	10.50	-31.30	-25	6.30
10470.0	53.17	356	1.0	V	-42.8	2.60	10.50	-34.90	-25	9.90
13087.5	47.68	282	1.3	H	-49.5	2.70	12.70	-39.50	-25	14.50
13087.5	46.34	231	1.8	V	-51.0	2.70	12.70	-41.00	-25	16.00
15705.0	46.29	318	1.4	H	-49.8	2.60	15.40	-37.00	-25	12.00
15705.0	45.67	324	2.4	V	-51.5	2.60	15.40	-38.70	-25	13.70

Frequency	Receiver	Turntable	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
(MHz)	Reading (dBμV)	Angle Degree	Height (m)	Polar (H/V)	Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
Band 41										
Test frequency range: 30 MHz ~ 26.5GHz										
5 MHz, Low channel										
963.2	31.29	137	1.4	H	-65.2	1.36	0.0	-66.56	-25	41.56
963.2	32.33	2	1.7	V	-61.7	1.36	0.0	-63.06	-25	38.06
4997.00	46.93	186	1.3	H	-53.7	1.70	12.00	-43.40	-25	18.40
4997.00	51.84	196	2.1	V	-48.2	1.70	12.00	-37.90	-25	12.90
7495.50	44.02	229	1.8	H	-51.9	1.90	10.70	-43.10	-25	18.10
7495.50	45.63	118	1.6	V	-49.9	1.90	10.70	-41.10	-25	16.10
5 MHz, Middle channel										
962.6	31.07	172	1.8	H	-65.4	1.36	0.0	-66.76	-25	41.76
962.6	32.39	137	1.2	V	-61.7	1.36	0.0	-63.06	-25	38.06
5190.00	47.05	247	1.3	H	-53.0	1.60	12.10	-42.50	-25	17.50
5190.00	52.41	349	1.6	V	-47.2	1.60	12.10	-36.70	-25	11.70
7785.00	43.73	48	1.9	H	-52.5	2.00	10.50	-44.00	-25	19.00
7785.00	44.74	77	1.9	V	-51.4	2.00	10.50	-42.90	-25	17.90
5 MHz, High channel										
966.4	31.05	83	2.4	H	-65.5	1.36	0.0	-66.86	-25	41.86
966.4	32.21	339	2.4	V	-61.8	1.36	0.0	-63.16	-25	38.16
5375.00	47.85	143	1.8	H	-52.1	1.60	12.30	-41.40	-25	16.40
5375.00	53.68	7	2.1	V	-45.5	1.60	12.30	-34.80	-25	9.80
8062.50	45.62	304	1.6	H	-52.4	2.10	10.70	-43.80	-25	18.80
8062.50	46.05	222	1.9	V	-51.9	2.10	10.70	-43.30	-25	18.30

Note:

Absolute Level = Substituted Level - Cable loss + Antenna Gain

Margin = Limit- Absolute Level

dBd is for the ERP, dBi is for EIRP.

FCC § 22.917 (a); § 24.238 (a); §27.53(c) (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.

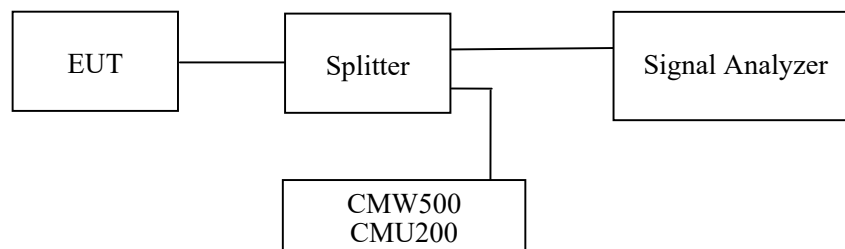
According to §24.238(a), the power of any emissions outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

According to FCC §27.53 (c)(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:	25.2~ 29.2 °C
Relative Humidity:	51~52 %
ATM Pressure:	101.0 kPa

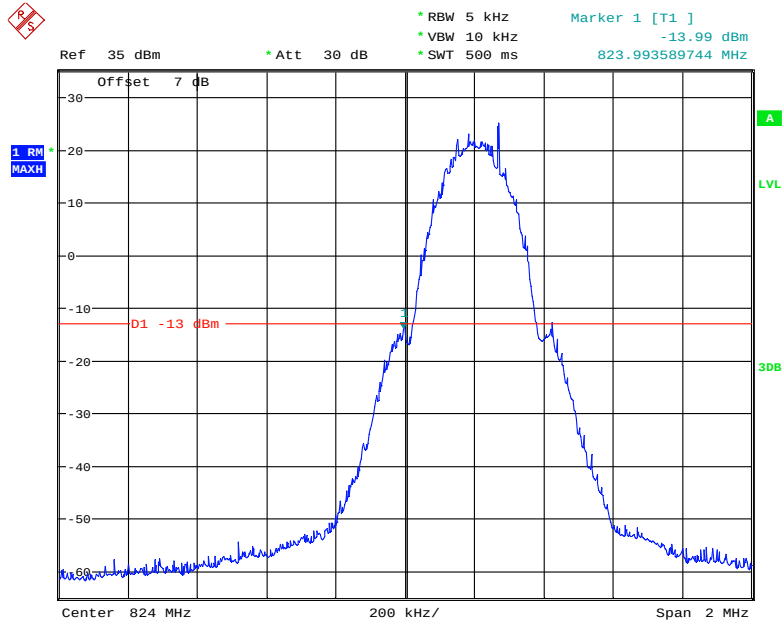
The testing was performed by Cala Liu and Key Pei from 2021-08-16 to 2021-09-09.

EUT operation mode: Transmitting (Worst case)

Test Result: Pass

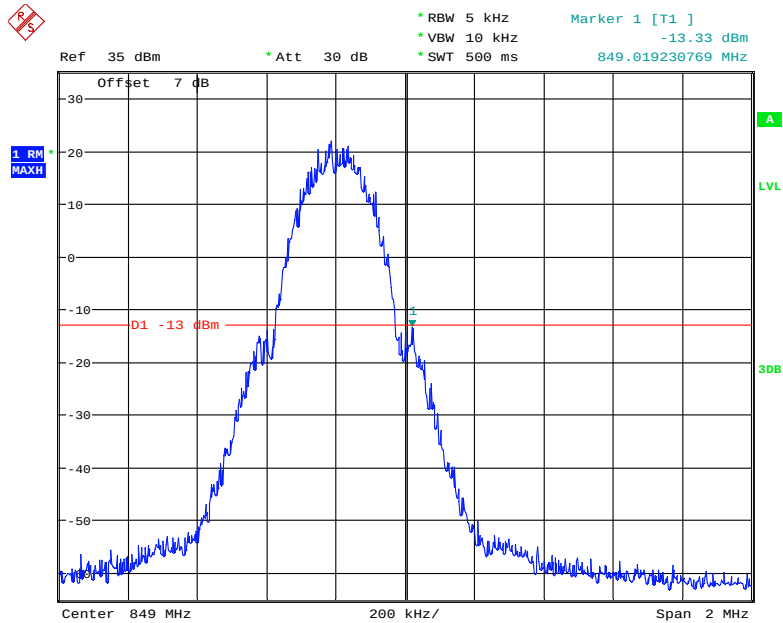
Please refer to the following plots.

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



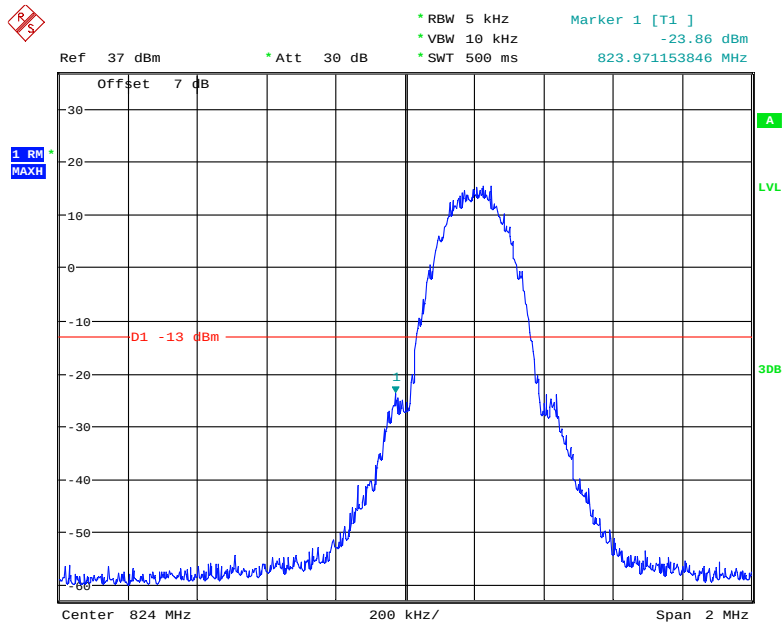
Date: 18.AUG.2021 23:41:29

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



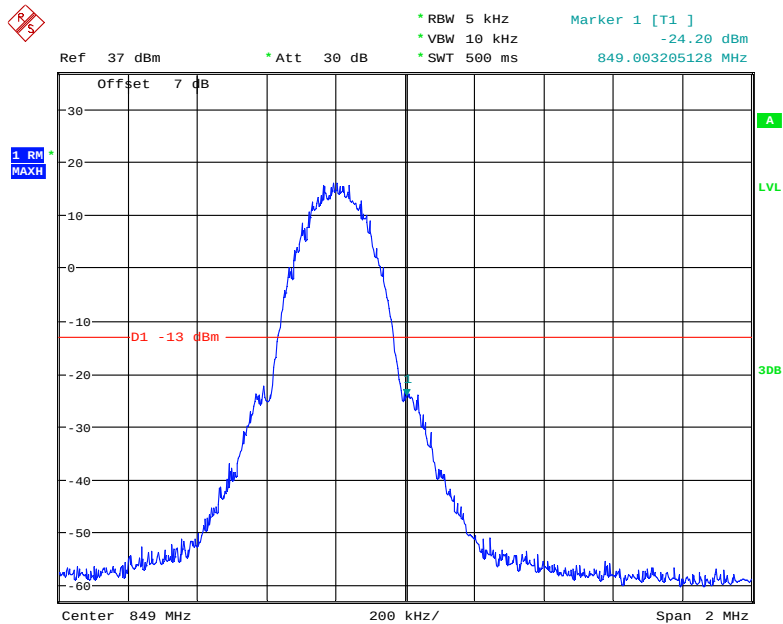
Date: 18.AUG.2021 23:44:21

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



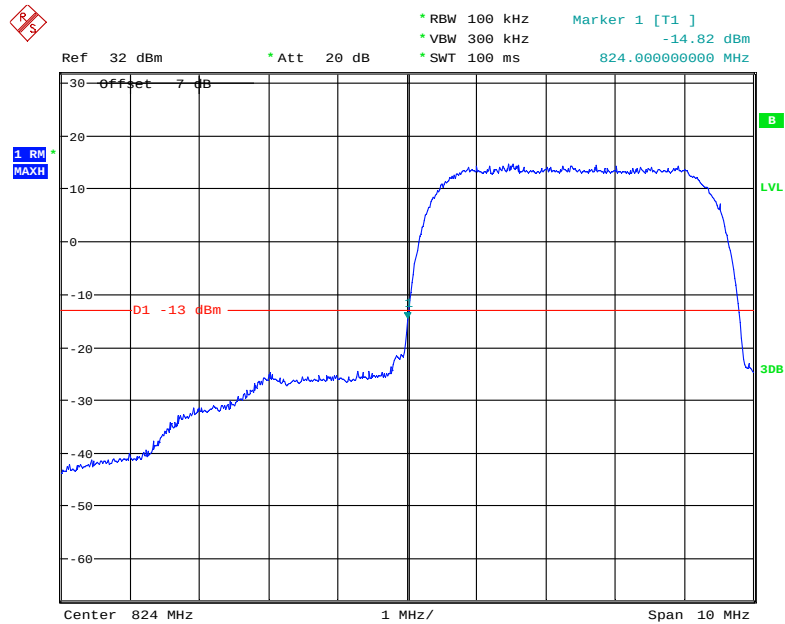
Date: 19.AUG.2021 00:11:04

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



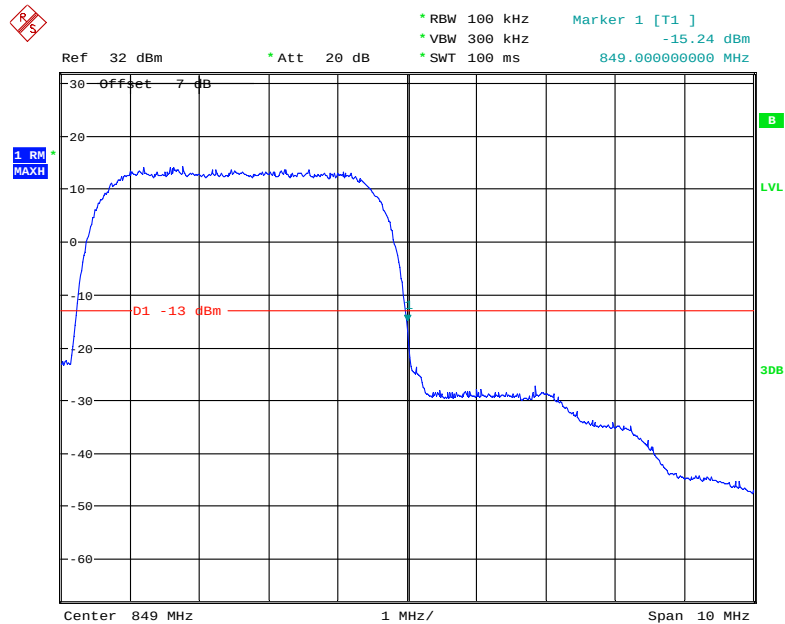
Date: 19.AUG.2021 00:12:31

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



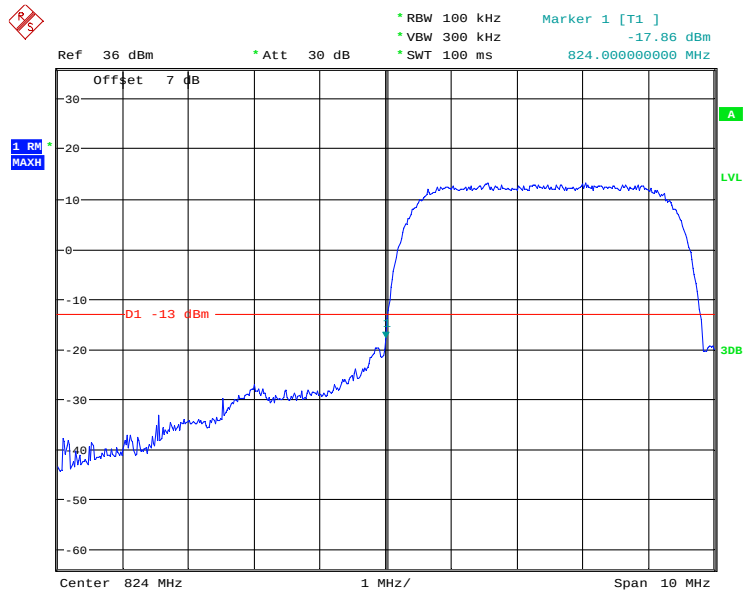
Date: 8.SEP.2021 14:00:53

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



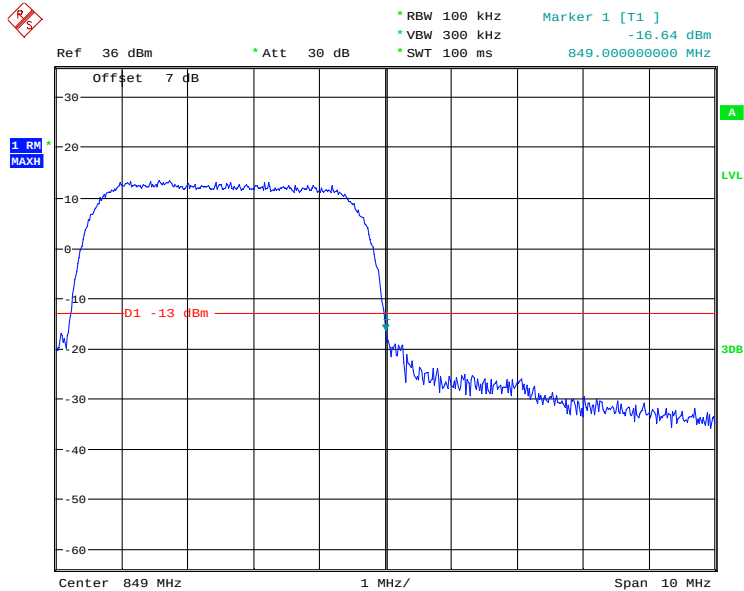
Date: 9.SEP.2021 09:17:30

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



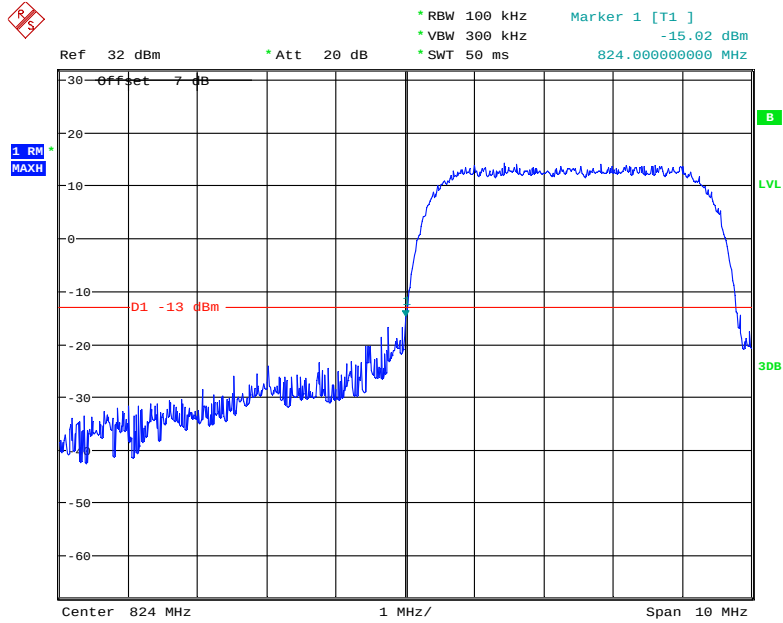
Date: 19.AUG.2021 21:27:08

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



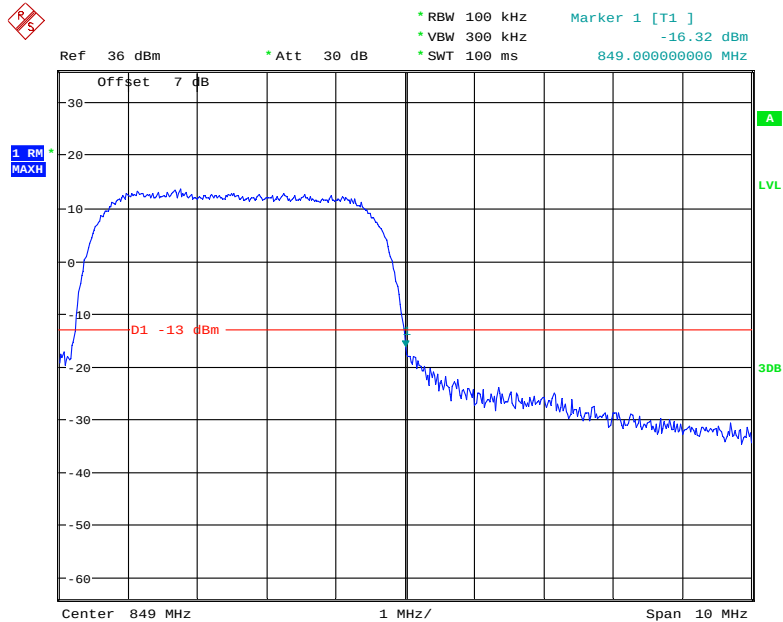
Date: 19.AUG.2021 21:26:32

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



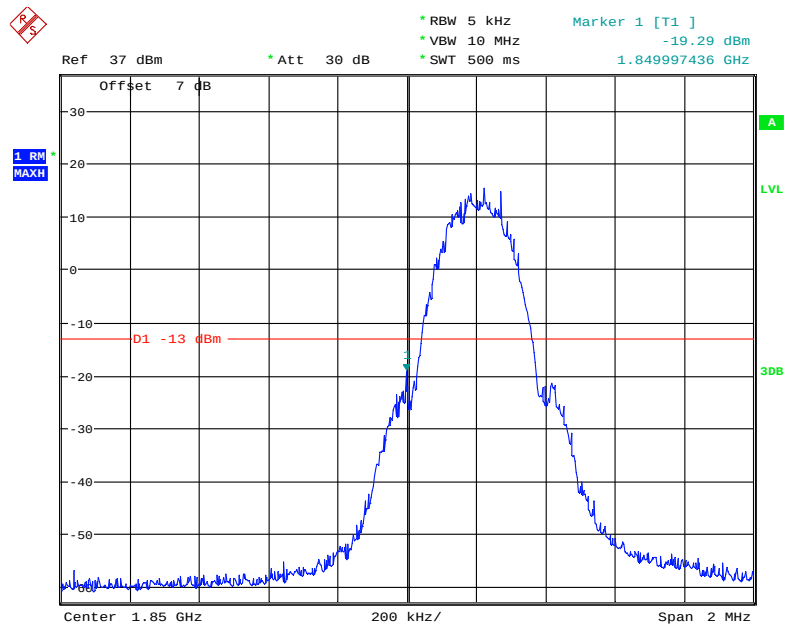
Date: 8.SEP.2021 14:03:49

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



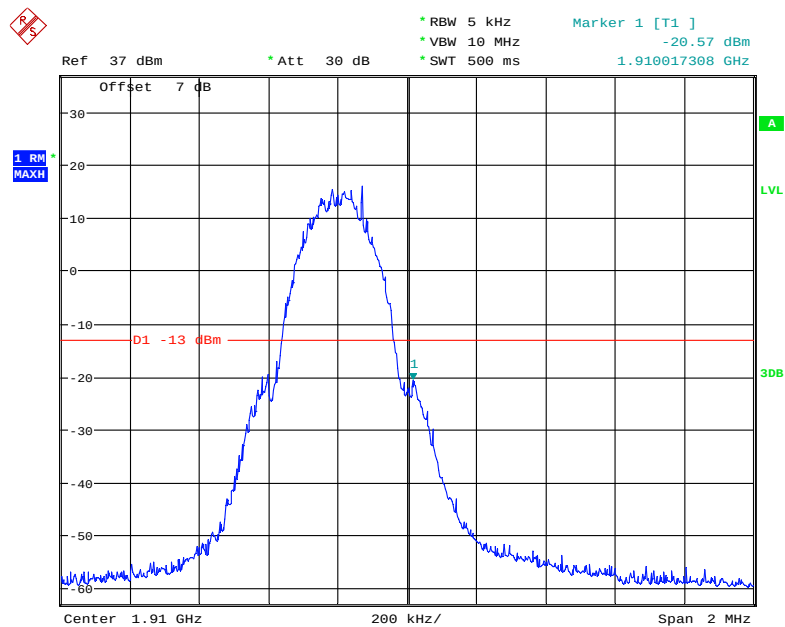
Date: 19.AUG.2021 21:11:02

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



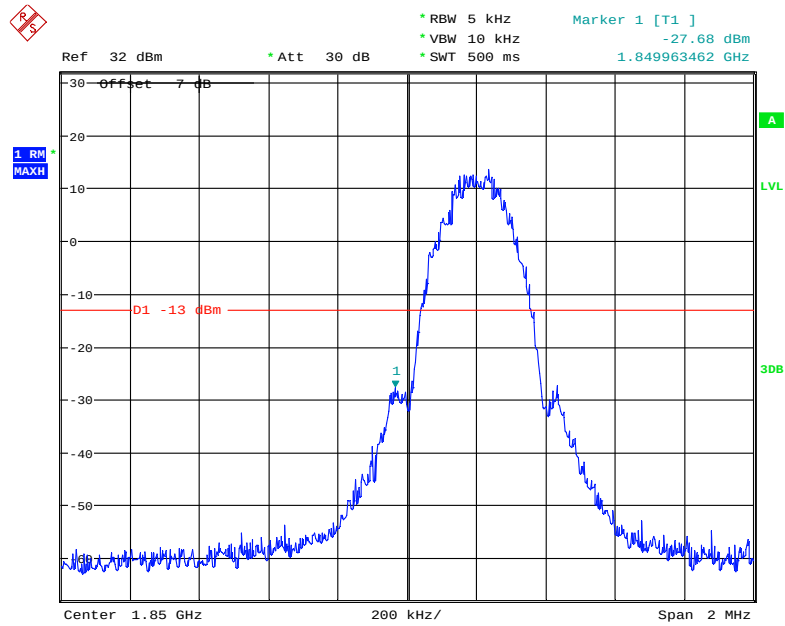
Date: 19.AUG.2021 00:27:34

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



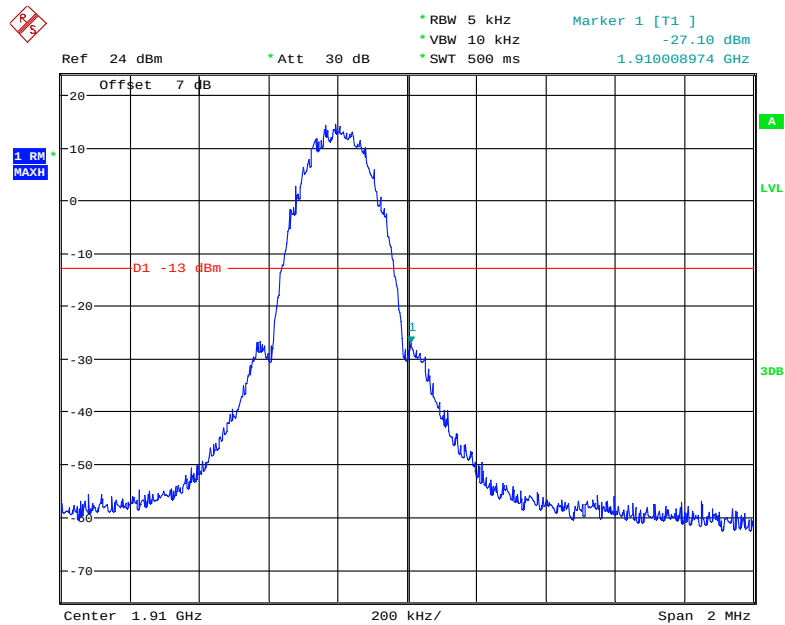
Date: 19.AUG.2021 00:29:14

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



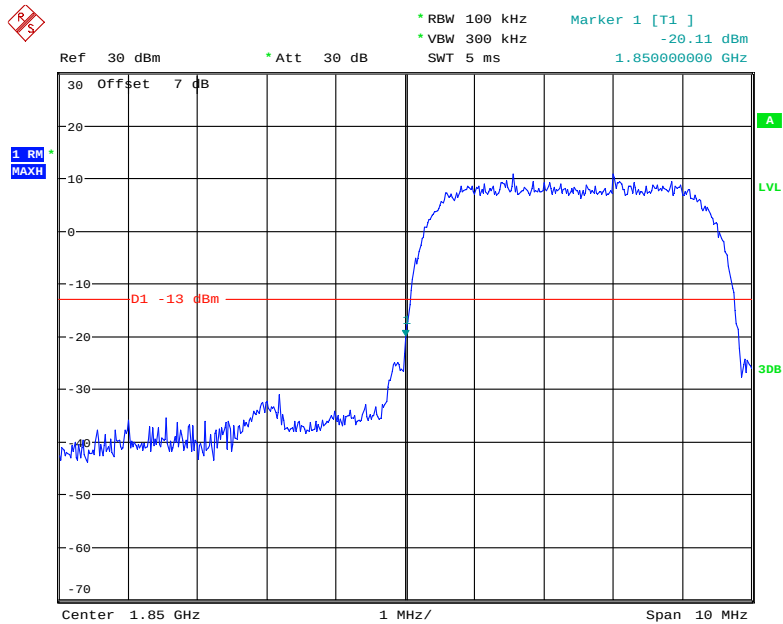
Date: 19.AUG.2021 01:01:40

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



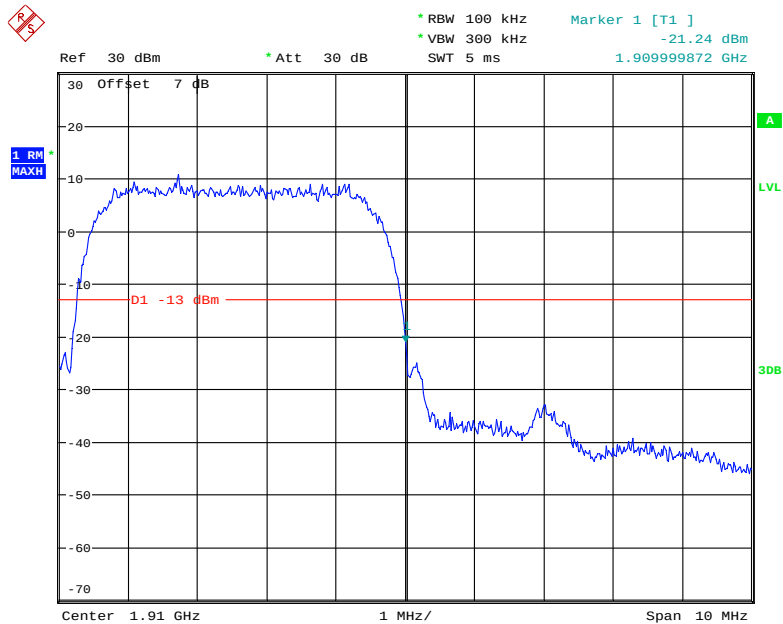
Date: 19.AUG.2021 00:51:39

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



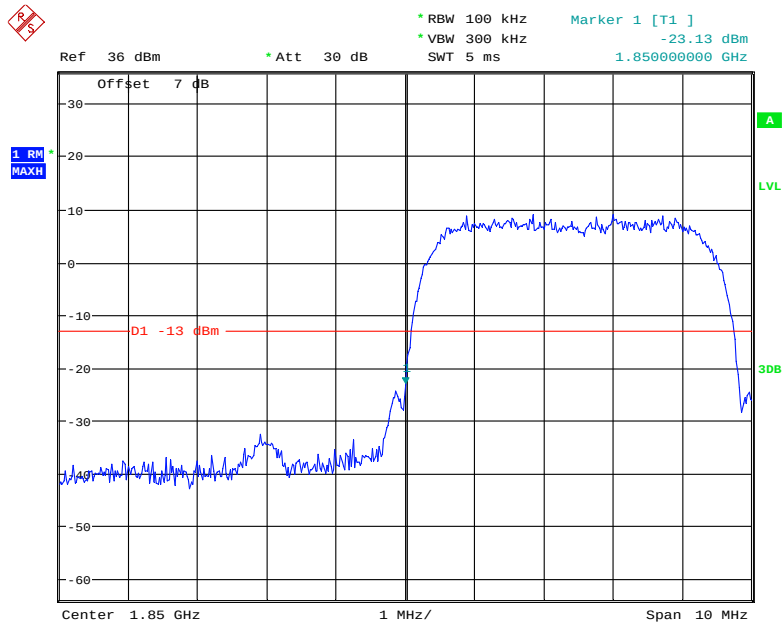
Date: 19.AUG.2021 20:59:31

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



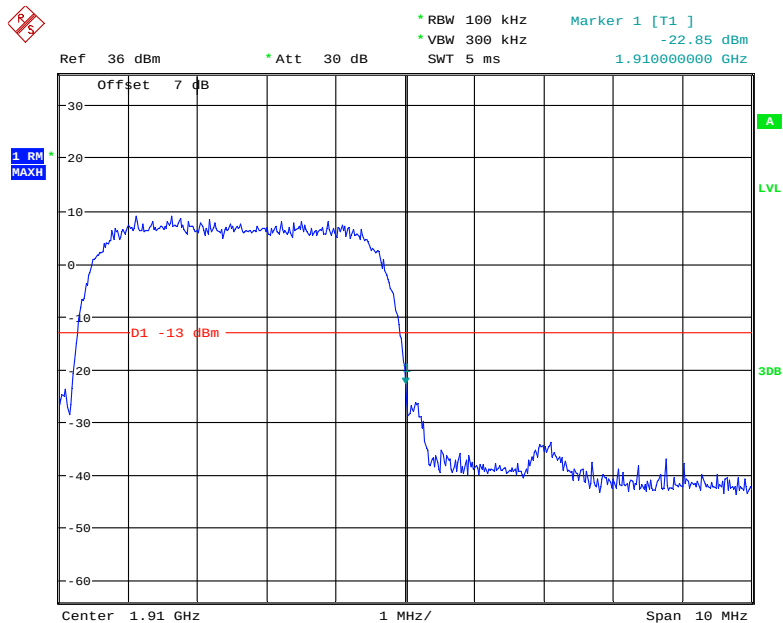
Date: 19.AUG.2021 20:57:33

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



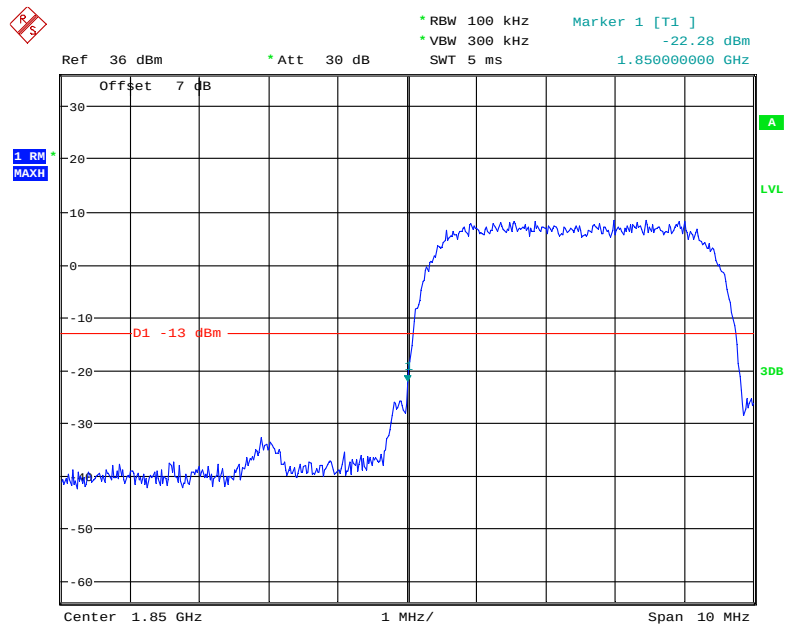
Date: 19.AUG.2021 21:23:37

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



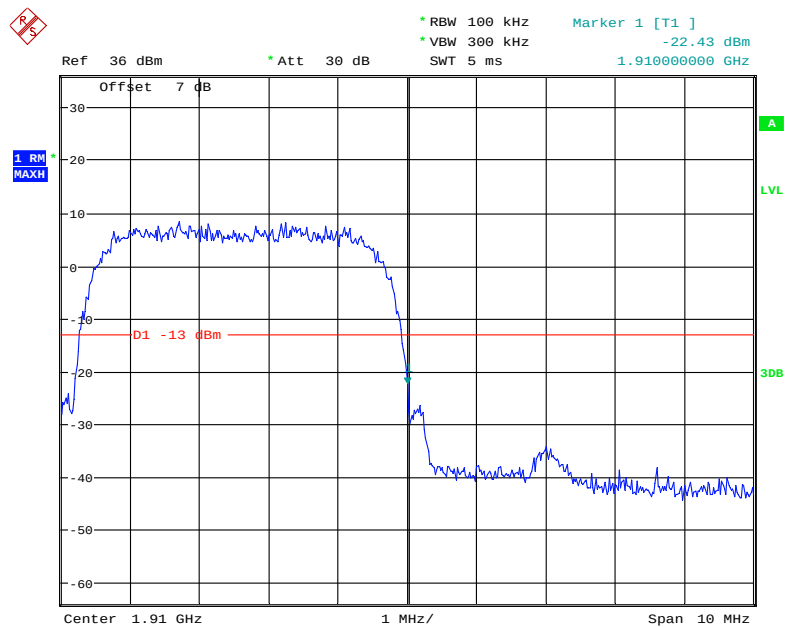
Date: 19.AUG.2021 21:22:59

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



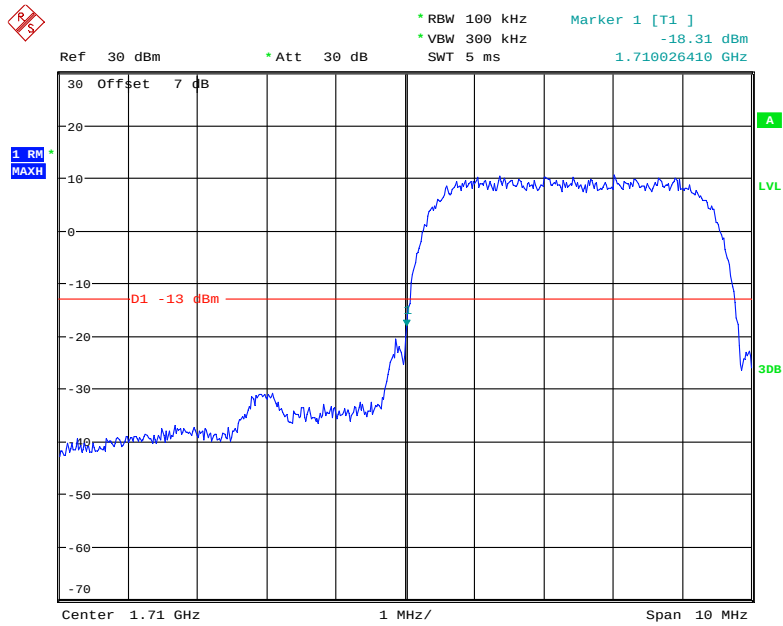
Date: 19.AUG.2021 21:20:46

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



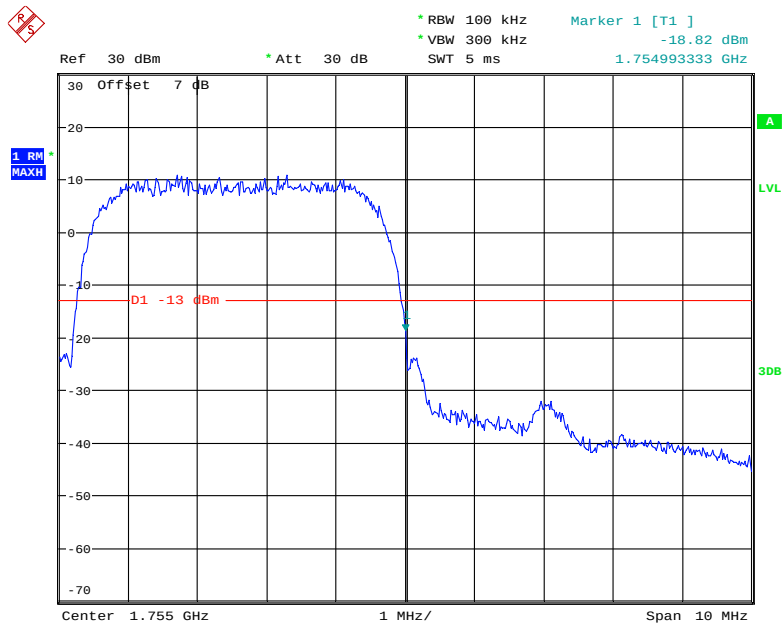
Date: 19.AUG.2021 21:21:35

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



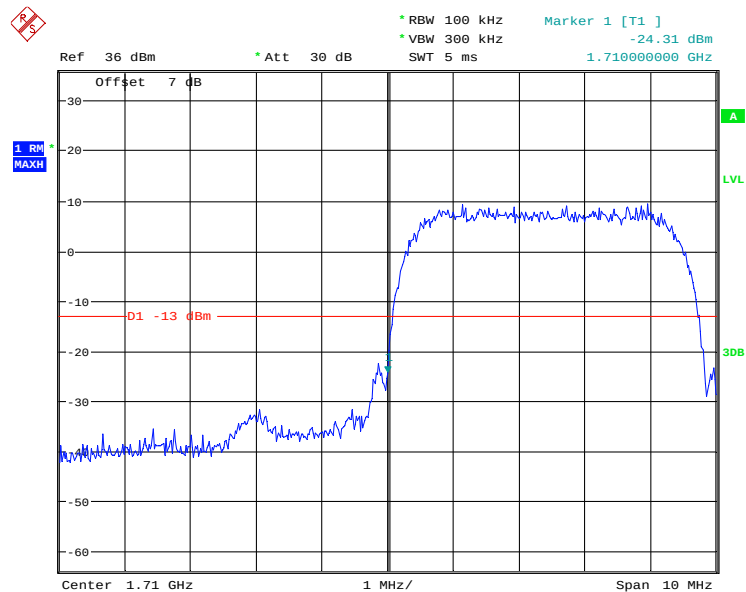
Date: 19.AUG.2021 21:05:14

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



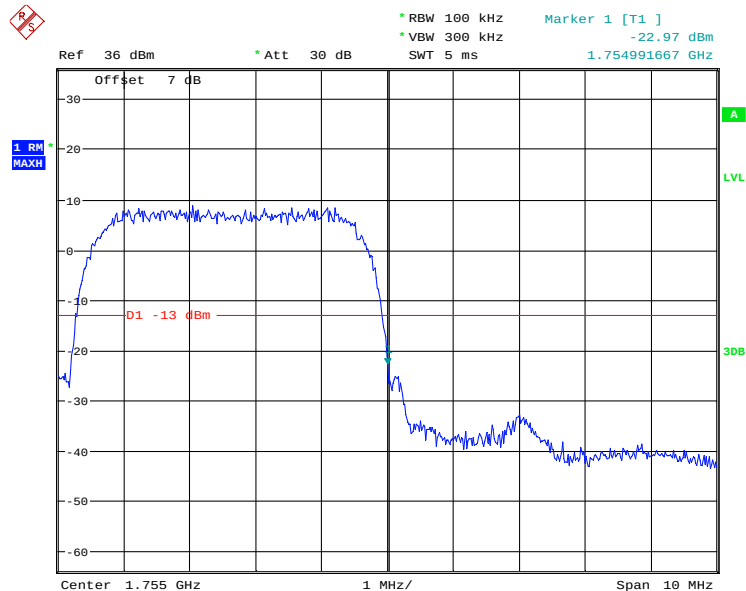
Date: 19.AUG.2021 21:00:25

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



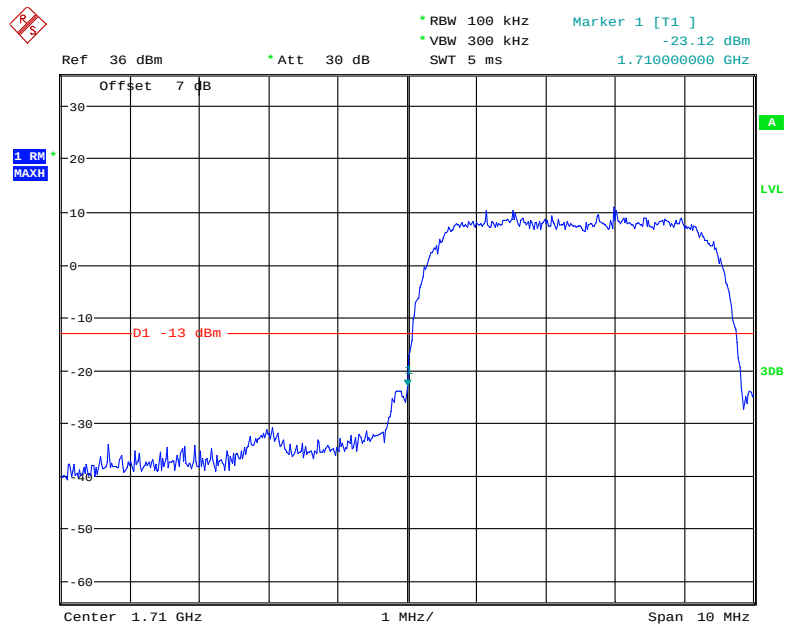
Date: 19.AUG.2021 21:24:22

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



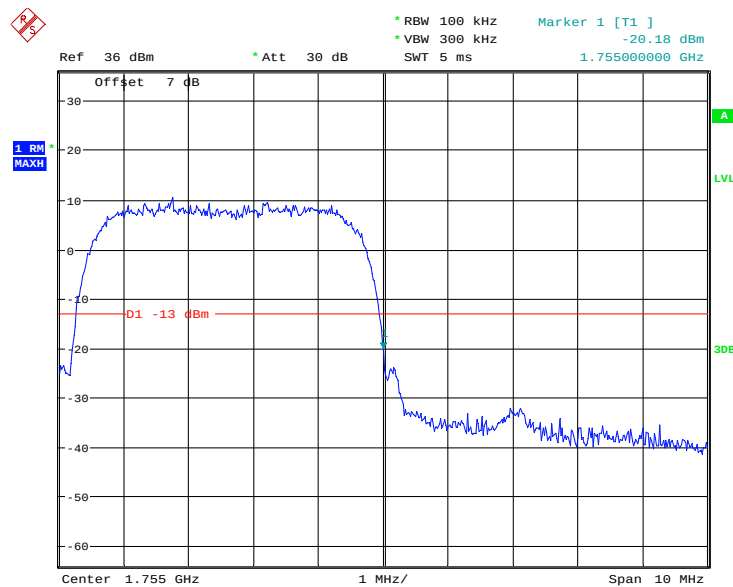
Date: 19.AUG.2021 21:25:10

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



Date: 19.AUG.2021 21:19:01

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



Date: 19.AUG.2021 21:16:44

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 and §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

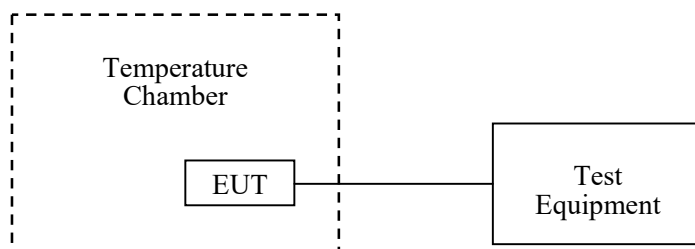
According to §24.235, the frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized frequency block.

Test Procedure

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

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

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



Test Data**Environmental Conditions**

Temperature:	25.2~ 29.2 °C
Relative Humidity:	51~52 %
ATM Pressure:	101.0 kPa

The testing was performed by Cala Liu and Key Pei from 2021-08-16 to 2021-08-19.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the following tables.

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

Middle Channel, $f_0 = 836.6\text{MHz}$				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	NV	-4	-0.0048	2.5
-20		-5	-0.0060	2.5
-10		-3	-0.0036	2.5
0		-4	-0.0048	2.5
10		-2	-0.0024	2.5
20		-4	-0.0048	2.5
30		4	0.0048	2.5
40		5	0.0060	2.5
50		-4	-0.0048	2.5
20	LV	5	0.0060	2.5
	HV	-3	-0.0036	2.5

EDGE Mode

Middle Channel, $f_0 = 836.6\text{MHz}$				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	NV	-12	-0.0143	2.5
-20		-10	-0.0120	2.5
-10		-11	-0.0131	2.5
0		-13	-0.0155	2.5
10		-12	-0.0143	2.5
20		-12	-0.0143	2.5
30		-10	-0.0120	2.5
40		-13	-0.0155	2.5
50		-10	-0.0120	2.5
20	LV	-12	-0.0143	2.5
	HV	-9	-0.0108	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	NV	23	0.0122	pass
-20		22	0.0117	pass
-10		23	0.0122	pass
0		22	0.0117	pass
10		20	0.0106	pass
20		21	0.0112	pass
30		24	0.0128	pass
40		22	0.0117	pass
50		23	0.0122	pass
20	LV	22	0.0117	pass
	HV	22	0.0117	pass

EDGE Mode

Middle Channel, $f_0 = 1880.0$ MHz				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	NV	-12	-0.0064	pass
-20		-13	-0.0069	pass
-10		-14	-0.0074	pass
0		-12	-0.0064	pass
10		-12	-0.0064	pass
20		-9	-0.0048	pass
30		-12	-0.0064	pass
40		-12	-0.0064	pass
50		-13	-0.0069	pass
20	LV	-14	-0.0074	pass
	HV	-10	-0.0053	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	NV	1710.0475	1754.6716	1710	1755
-20		1710.0283	1754.3322	1710	1755
-10		1710.0395	1754.5403	1710	1755
0		1710.3763	1754.4425	1710	1755
10		1710.0419	1754.2533	1710	1755
20		1710.1085	1754.5881	1710	1755
30		1710.0518	1754.4473	1710	1755
40		1710.2347	1754.5685	1710	1755
50		1710.2800	1754.3375	1710	1755
20	LV	1710.0278	1754.5930	1710	1755
	HV	1710.0198	1754.3809	1710	1755

LTE:
QPSK:

Band 2:

10.0 MHz Middle Channel, $f_o=1880\text{MHz}$				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	NV	-6.38	-0.0034	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	LV	-8.17	-0.0043	pass
	HV	-7.05	-0.0038	pass

Band 4:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	NV	1710.0475	1754.6716	1710	1755
-20		1710.0283	1754.3322	1710	1755
-10		1710.0395	1754.5403	1710	1755
0		1710.3763	1754.4425	1710	1755
10		1710.0419	1754.2533	1710	1755
20		1710.1085	1754.5881	1710	1755
30		1710.0518	1754.4473	1710	1755
40		1710.2347	1754.5685	1710	1755
50		1710.2800	1754.3375	1710	1755
20	LV	1710.0278	1754.5930	1710	1755
	HV	1710.0198	1754.3809	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	NV	-4.29	-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	LV	8.99	0.0107	2.5
	HV	-7.17	-0.0086	2.5

Band 7:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V_{DC})	F_L (MHz)	F_H (MHz)	F_L Limit (MHz)	F_H Limit (MHz)
-30	NV	2500.4326	2569.1351	2500	2570
-20		2500.6402	2569.4927	2500	2570
-10		2500.5102	2569.5387	2500	2570
0		2500.3244	2569.7585	2500	2570
10		2500.5305	2569.7396	2500	2570
20		2500.2616	2569.4154	2500	2570
30		2500.7492	2569.7725	2500	2570
40		2500.1979	2569.3558	2500	2570
50		2500.7209	2569.5023	2500	2570
20	LV	2500.8783	2569.4603	2500	2570
	HV	2500.3013	2569.4462	2500	2570

Band 38:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	NV	2570.4396	2619.6816	2570	2620
-20		2570.4010	2619.6724	2570	2620
-10		2570.4200	2619.6623	2570	2620
0		2570.4100	2619.6522	2570	2620
10		2570.4001	2619.6421	2570	2620
20		2570.4904	2619.6321	2570	2620
30		2570.4801	2619.6221	2570	2620
40		2570.4706	2619.6121	2570	2620
50		2570.4632	2619.5370	2570	2620
20	LV	2570.4522	2619.6201	2570	2620
	HV	2570.4028	2619.7034	2570	2620

Band 41:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	NV	2535.9724	2654.9946	2535	2655
-20		2535.8622	2654.8853	2535	2655
-10		2535.7521	2654.7754	2535	2655
0		2535.6422	2654.6652	2535	2655
10		2535.5323	2654.5554	2535	2655
20		2535.4220	2654.4453	2535	2655
30		2535.3121	2654.3357	2535	2655
40		2535.2021	2654.2252	2535	2655
50		2535.1920	2654.1052	2535	2655
20	LV	2535.8621	2654.0051	2535	2655
	HV	2535.7524	2654.0002	2535	2655

Note: the frequency range 2535-2655MHz was declared by applicant.

16QAM:**Band 2:**

10.0 MHz Middle Channel, $f_o=1880\text{MHz}$				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	NV	-11.36	-0.006	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	LV	6.05	0.0032	pass
	HV	7.52	0.004	pass

Band 4:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	NV	1710.0464	1754.6367	1710	1755
-20		1710.2598	1754.5474	1710	1755
-10		1710.5072	1754.5642	1710	1755
0		1710.4068	1754.4863	1710	1755
10		1710.5097	1754.8358	1710	1755
20		1710.2744	1754.6456	1710	1755
30		1710.4473	1754.5646	1710	1755
40		1710.5614	1754.8298	1710	1755
50		1710.6572	1754.4647	1710	1755
20	LV	1710.2998	1754.8798	1710	1755
	HV	1710.4945	1754.2520	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	NV	-5.49	-0.0066	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	LV	6.34	0.0076	2.5
	HV	-6.89	-0.0082	2.5

Band 7:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	NV	2500.4326	2569.1351	2500	2570
-20		2500.6402	2569.4927	2500	2570
-10		2500.5102	2569.5386	2500	2570
0		2500.3244	2569.7585	2500	2570
10		2500.5305	2569.7396	2500	2570
20		2500.2616	2569.4174	2500	2570
30		2500.7492	2569.7725	2500	2570
40		2500.1979	2569.3558	2500	2570
50		2500.7209	2569.5023	2500	2570
20	LV	2500.8783	2569.4603	2500	2570
	HV	2500.3013	2569.4462	2500	2570

Band 38:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	NV	2570.3998	2619.6889	2570	2620
-20		2570.3913	2619.6790	2570	2620
-10		2570.3823	2619.6690	2570	2620
0		2570.3724	2619.6591	2570	2620
10		2570.3632	2619.6490	2570	2620
20		2570.3512	2619.6392	2570	2620
30		2570.3411	2619.6291	2570	2620
40		2570.3342	2619.6191	2570	2620
50		2570.3285	2619.6090	2570	2620
20	LV	2570.3176	2619.6792	2570	2620
	HV	2570.3031	2619.6691	2570	2620

Band 41:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	NV	2535.9499	2654.9679	2535	2655
-20		2535.8484	2654.8581	2535	2655
-10		2535.7376	2654.7482	2535	2655
0		2535.6265	2654.6383	2535	2655
10		2535.5138	2654.5284	2535	2655
20		2535.4179	2654.4183	2535	2655
30		2535.2999	2654.3082	2535	2655
40		2535.1889	2654.1981	2535	2655
50		2535.1803	2654.0884	2535	2655
20	LV	2535.1621	2654.0762	2535	2655
	HV	2535.0573	2654.0318	2535	2655

Note: the frequency range 2535-2655MHz was declared by applicant.

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