

TESTREPORT

Applicant Name : TECNO MOBILE LIMITED
Address : FLAT 39 8/F BLOCK D WAH LOK INDUSTRIAL CENTRE 31-35
SHAN MEI STREET FOTAN NT Hong Kong
ReportNumber: SZNS220214-04409E-RF-00C
FCC ID: 2ADYY-BE7

Test Standard (s)

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

Sample Description

Product Type: Mobile Phone
Model No.: BE7
Multiple Model(s) No.: N/A
Trade Mark: TECNO
Date Received: 2022/02/14
Date of Test: 2022/02/25~2022/03/22
Report Date: 2022/03/22

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

Prepared and Checked By:



Ting lv
EMC Engineer

Approved By:



Robert Li
EMC Engineer

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

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Frequency Range	GSM 850: 824-849MHz(TX); 869-894MHz(RX) PCS 1900: 1850-1910MHz(TX); 1930-1990MHz(RX) WCDMA Band 2: 1850-1910MHz(TX); 1930-1990MHz(RX) WCDMA Band 4: 1710-1755MHz(TX); 2110-2155MHz(RX) WCDMA Band 5: 824-849MHz(TX); 869-894MHz(RX) LTE Band 2: 1850-1910MHz(TX); 1930-1990MHz(RX) LTE Band 4: 1710-1755MHz(TX); 2110-2155MHz(RX) LTE Band 5: 824-849MHz(TX); 869-894MHz(RX) LTE Band 7: 2500-2570MHz(TX); 2620-2690MHz(RX) LTE Band 12: 699-716MHz(TX); 729-746MHz(RX) LTE Band 17: 704-716MHz(TX); 734-746MHz(RX) LTE Band 38: 2570-2620MHz(TX/RX) LTE Band 41: 2535-2655MHz(TX/RX) LTE Band 66: 1710-1780MHz(TX); 2110-2180MHz(RX)
Modulation Technique	2G: GMSK, 8PSK 3G: BPSK, QPSK, 16QAM 4G: QPSK, 16QAM
Antenna Specification*	GSM850/WCDMA Band5/LTE Band 5: -1.42dBi PCS1900/WCDMA Band 2/ LTE Band 2: -0.66dBi WCDMA Band 4/ LTE Band 4/ LTE Band 66: -0.73dBi LTE Band 7/LTE Band 38/LTE Band 41: -0.58dBi LTE Band 12/LTE Band 17: -1.7dBi (provided by the applicant)
Voltage Range	DC 3.85V from battery, DC 5.0V from adapter
Sample serial number	SZNS220215-04501E-RF-S1 for Conducted and Radiated Emissions SZNS220215-04501E-RF-S2 for RF Conducted Test (Assigned by ATC)
Sample/EUT Status	Good condition
Extreme condition*	L.V.: Low Voltage 3.45V N.V.: Normal Voltage 3.85V H.V.: High Voltage 4.4V (provided by the applicant)
Adapter information	Model: U050TSA Input: AC 100-240V, 50/60Hz, Max 0.2A Output: DC 5.0V, 1.0A

Objective

This test report is in accordance with Part 2-Subpart J, Part 22-Subpart H, Part 24-Subpart E, and Subpart 27 of the Federal Communication Commission's rules.

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

Test Methodology

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

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

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

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

Measurement Uncertainty

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

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

Test Facility

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

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 708358, the FCC Designation No.: CN1189. Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 429 7.01.

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

SYSTEM TEST CONFIGURATION

Description of Test Configuration

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

Test was performed as below table:

Frequency band	Bandwidth (MHz)	Test Frequency(MHz)		
		Low	Middle	High
GSM850	0.25	824.2	836.6	848.8
DCS1900	0.25	1850.2	1880	1909.8
WCDMA B2	4.2	1852.4	1880	1907.6
WCDMA B4	4.2	1712.4	1732.6	1752.6
WCDMA B5	4.2	826.4	836.6	846.6
LTE B2	1.4	1850.7	1880	1909.3
	3	1851.5	1880	1908.5
	5	1852.5	1880	1907.5
	10	1855	1880	1905
	15	1857.5	1880	1902.5
	20	1860	1880	1900
LTE B4	1.4	1710.7	1732.5	1754.3
	3	1711.5	1732.5	1753.5
	5	1712.5	1732.5	1752.5
	10	1715	1732.5	1750
	15	1717.5	1732.5	1747.5
	20	1720	1732.5	1745
LTE B5	1.4	824.7	836.5	848.3
	3	825.5	836.5	847.5
	5	826.5	836.5	846.5
	10	829	836.5	844
LTE B7	5	2502.5	2535	2567.5
	10	2505	2535	2565
	15	2507.5	2535	2562.5
	20	2510	2535	2560
LTE B12	1.4	699.7	707.5	715.3
	3	700.5	707.5	714.5
	5	701.5	707.5	713.5
	10	704	707.5	711
LTE B17	5	706.5	710	713.5
	10	709	710	711

Frequency band	Bandwidth (MHz)	Test Frequency(MHz)		
		Low	Middle	High
LTE B38	5	2572.5	2595	2617.5
	10	2575	2595	2615
	15	2577.5	2595	2612.5
	20	2580	2595	2610
LTE B41	5	2537.5	2595	2652.5
	10	2540	2595	2650
	15	2542.5	2595	2647.5
	20	2545	2595	2645
LTE B66	1.4	1710.7	1745	1779.3
	3	1711.5	1745	1778.5
	5	1712.5	1745	1777.5
	10	1715	1745	1775
	15	1717.5	1745	1772.5
	20	1720	1745	1770

Equipment Modifications

No modification was made to the EUT.

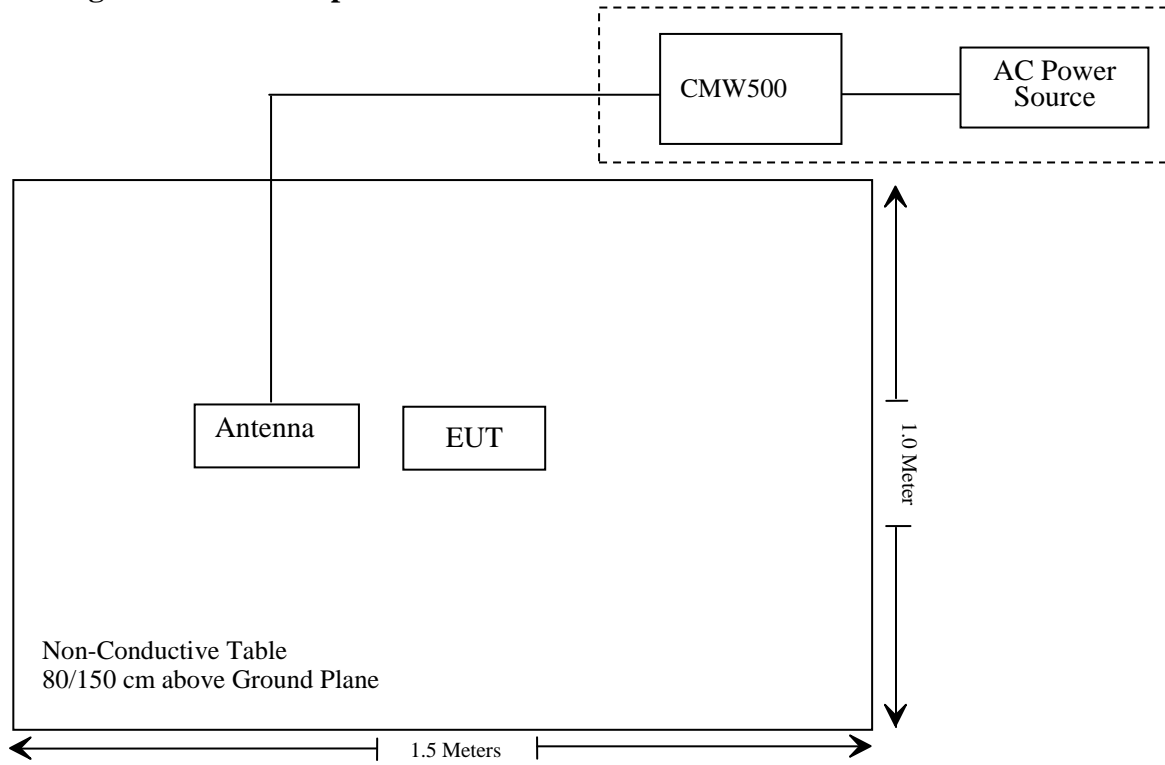
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Rohde&Schwarz	Wideband Radio Communication Tester	CMW500	1201.002K50-11621 8-UY

Support Cable Description

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

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

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

Note: * Please refer to SAR report number: SZNS220214-04409E-SA.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test					
Rohde& Schwarz	Test Receiver	ESR	102725	2021/12/13	2022/12/12
Rohde&Schwarz	Spectrum Analyzer	FSV40	101949	2021/12/13	2022/12/12
SONOMA INSTRUMENT	Amplifier	310 N	186131	2021/11/09	2022/11/08
A.H. Systems, inc.	Preamplifier	PAM-0118P	135	2021/11/09	2022/11/08
Quinstar	Amplifier	QLW-184055 36-J0	15964001002	2021/11/11	2022/11/10
Unknown	RF Coaxial Cable	No.10	N050	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.11	N1000	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.12	N040	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.13	N300	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.15	N600	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.16	N650	2021/12/14	2022/12/13
Unknown	Band Reject Filter	MSF824-862 MS-1147	1147	2021/12/14	2022/12/13
Unknown	Band Reject Filter	MSF1850-191 OMS-1148	1148	2021/12/14	2022/12/13
Unknown	Band Reject Filter	MSF1710-178 5MS-1150	1150	2021/12/14	2022/12/13
Unknown	Band Reject Filter	MSF2495-257 OMS-1152	1152	2021/12/14	2022/12/13
Unknown	Band Reject Filter	MSF700-800 MS-1153	201706003	2021/12/14	2022/12/13
Schwarzbeck	Bilog Antenna	VULB9163	9163-194	2020/01/05	2023/01/04
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2021/07/06	2024/07/05
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-655	2020/01/05	2023/01/04
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-1067	2020/01/05	2023/01/04
PASTERNAK	Horn Antenn	PE9852/2F-20	1121	2020/01/05	2023/01/04
PASTERNAK	Horn Antenn	PE9852/2F-20	1120	2020/01/05	2023/01/04
Agilent	Signal Generator	N5183A	MY51040755	2021/12/13	2022/12/12
Unknown	RF Coaxial Cable	No.16	N200	2021/12/14	2022/12/13

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
Rohde & Schwarz	Spectrum Analyzer	FSU26	200982	2021/07/06	2022/07/05
Rohde&Schwarz	Spectrum Analyzer	FSV-40	101948	2021/12/13	2022/12/12
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	154606	2021/12/13	2022/12/12
Mini-Circuits	Power Splitter	DC-18000MHz	SF10944151S	2021/12/14	2022/12/13
Gongwen	Temp. & Humid. Chamber	HSD-500	109	2021/10/14	2022/10/13
HP	6dB Attenuator	8493B	2708A 04769	2021/12/14	2022/12/13
Fluke	Multi Meter	45	7664009	2021/12/14	2022/12/13
Manson	DC Power Source	KPS-6604	ATCS-205	NCR	NCR
Unknown	RF Coaxial Cable	No.31	RF-01	Each time	/
Unknown	RF Cable	Unknown	Unknown	Each time	/

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

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

Applicable Standard

FCC§1.1310 and §2.1093.

Test Result

Compliant, please refer to the SAR report: SZNS220214-04409E-SA.

FCC §2.1047 - MODULATION CHARACTERISTIC

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

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

Applicable Standard

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

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

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

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

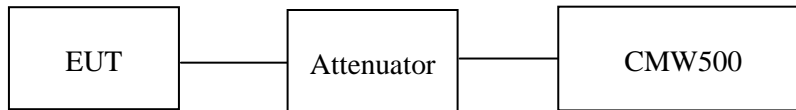
According to § 27.50(d), Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

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

Test Procedure

Conducted method:

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



Test Data

Environmental Conditions

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

The testing was performed by Gala Liu from 2022-02-22 to 2022-03-03.

Cellular Band (Part 22H)

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	ERP(dBm)	Limit (dBm)
GSM	128	824.2	32.60	28.53	38.45
	190	836.6	32.40	28.33	38.45
	251	848.8	33.20	29.13	38.45

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)				ERP(dBm)				Limit (dBm)
			1 slot	2 slots	3 slots	4 slots	1 slot	2 slots	3 slots	4 slots	
GPRS	128	824.2	32.45	31.93	30.43	29.44	28.38	27.86	26.36	25.37	38.45
	190	836.6	32.10	31.48	29.93	28.97	28.03	27.41	25.86	24.90	38.45
	251	848.8	32.36	31.72	30.25	29.31	28.29	27.65	26.18	25.24	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	27.18	25.80	23.67	22.36	23.11	21.73	19.60	18.29	38.45
	190	836.6	27.09	25.86	23.65	22.35	23.02	21.79	19.58	18.28	38.45
	251	848.8	27.27	25.95	23.78	22.45	23.20	21.88	19.71	18.38	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		22.87	22.92	22.93	18.80	18.85	18.86
	HSDPA	1	20.51	20.46	20.25	16.44	16.39	16.18
		2	20.55	20.42	20.33	16.48	16.35	16.26
		3	20.48	20.39	20.34	16.41	16.32	16.27
		4	20.53	20.51	20.29	16.46	16.44	16.22
	HSUPA	1	21.69	21.73	21.50	17.62	17.66	17.43
		2	21.55	21.72	21.59	17.48	17.65	17.52
		3	21.56	21.66	21.64	17.49	17.59	17.57
		4	21.53	21.69	21.53	17.46	17.62	17.46
		5	21.48	21.54	21.49	17.41	17.47	17.42
HSPA+	1	21.56	21.49	21.47	17.49	17.42	17.40	

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd) - Cable loss(dB)
For GSM850 / WCDMA Band5: Antenna Gain = -1.42dBi = -3.57dBd (0dBd=2.15dBi)
Cable Loss=0.5dB* (provided by the applicant)
Limit: ERP≤38.45dBm

PCS Band (Part 24E)

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	EIRP(dBm)	Limit (dBm)
GSM	512	1850.2	29.00	27.54	33
	661	1880.0	29.00	27.54	33
	810	1909.8	29.10	27.64	33

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)				EIRP(dBm)				Limit (dBm)
			1 slot	2 slots	3 slots	4 slots	1 slot	2 slots	3 slots	4 slots	
GPRS	512	1850.2	28.99	28.29	26.66	25.59	27.53	26.83	25.2	24.13	33
	661	1880.0	29.05	28.40	26.76	25.69	27.59	26.94	25.3	24.23	33
	810	1909.8	29.07	28.40	26.83	25.76	27.61	26.94	25.37	24.30	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	26.14	25.02	23.05	21.97	24.68	23.56	21.59	20.51	33
	661	1880.0	25.80	24.72	22.75	21.65	24.34	23.26	21.29	20.19	33
	810	1909.8	25.67	24.57	22.47	21.43	24.21	23.11	21.01	19.97	33

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 2)	RMC12.2k		22.24	22.14	22.09	20.78	20.68	20.63
	HSDPA	1	21.07	21.3	21.13	19.61	19.84	19.67
		2	21.16	21.45	21.16	19.7	19.99	19.7
		3	21.22	21.31	21.23	19.76	19.85	19.77
		4	21.08	21.29	21.28	19.62	19.83	19.82
	HSUPA	1	21.09	20.95	20.81	19.63	19.49	19.35
		2	21.02	20.98	20.88	19.56	19.52	19.42
		3	21.01	20.96	20.82	19.55	19.50	19.36
		4	21.04	20.97	20.85	19.58	19.51	19.39
		5	21.03	20.96	20.87	19.57	19.50	19.41
HSPA+	1	21.02	20.94	20.84	19.56	19.48	19.38	

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi) - Cable loss(dB)
For PCS1900 / WCDMA Band2: Antenna Gain = -0.66dBi
Cable Loss=0.8dB* (provided by the applicant)
Limit: EIRP ≤ 33dBm

AWS Band

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 4)	RMC12.2k		21.04	21.02	20.91	19.51	19.49	19.38
	HSDPA	1	20.04	20.14	19.95	18.51	18.61	18.42
		2	20.12	20.22	19.96	18.59	18.69	18.43
		3	20.23	20.14	20.04	18.70	18.61	18.51
		4	20.15	20.09	20.12	18.62	18.56	18.59
	HSUPA	1	20.06	19.92	19.76	18.53	18.39	18.23
		2	20.02	19.98	19.78	18.49	18.45	18.25
		3	20.01	19.97	19.64	18.48	18.44	18.11
		4	20.06	19.99	19.85	18.53	18.46	18.32
		5	20.10	20.01	19.79	18.57	18.48	18.26
	HSPA+	1	20.07	19.98	19.87	18.54	18.45	18.34

Note: $EIRP(dBm) = \text{Conducted Power}(dBm) + \text{Antenna Gain}(dBi) - \text{Cable loss}(dB)$

For Band4: Antenna Gain = -0.73dBi

Cable Loss=0.8dB* (provided by the applicant)

Limit: $EIRP \leq 30dBm$

LTE Band 2

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	20.40	21.03	20.99	18.94	19.57	19.53
		RB1#3	21.08	21.21	21.21	19.62	19.75	19.75
		RB1#5	20.95	21.04	21.00	19.49	19.58	19.54
		RB3#0	20.98	21.09	21.03	19.52	19.63	19.57
		RB3#3	20.99	21.08	21.06	19.53	19.62	19.60
		RB6#0	20.03	20.13	20.12	18.57	18.67	18.66
	16QAM	RB1#0	19.95	20.15	19.99	18.49	18.69	18.53
		RB1#3	20.10	20.34	20.22	18.64	18.88	18.76
		RB1#5	19.97	20.17	20.04	18.51	18.71	18.58
		RB3#0	20.22	20.11	20.14	18.76	18.65	18.68
		RB3#3	20.22	20.12	20.13	18.76	18.66	18.67
		RB6#0	19.03	19.12	19.01	17.57	17.66	17.55
3.0	QPSK	RB1#0	21.02	21.08	21.11	19.56	19.62	19.65
		RB1#8	20.96	21.10	21.09	19.50	19.64	19.63
		RB1#14	21.04	21.09	21.09	19.58	19.63	19.63
		RB6#0	20.05	20.09	20.09	18.59	18.63	18.63
		RB6#9	20.05	20.09	20.09	18.59	18.63	18.63
		RB15#0	20.04	20.12	20.11	18.58	18.66	18.65
	16QAM	RB1#0	20.55	20.26	20.10	19.09	18.80	18.64
		RB1#8	20.51	20.23	20.10	19.05	18.77	18.64
		RB1#14	20.60	20.23	20.07	19.14	18.77	18.61
		RB6#0	19.04	19.11	18.98	17.58	17.65	17.52
		RB6#9	19.03	19.09	18.96	17.57	17.63	17.50
		RB15#0	19.08	19.06	19.13	17.62	17.60	17.67

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	20.93	21.02	20.96	19.47	19.56	19.50
		RB1#13	21.08	21.16	21.11	19.62	19.70	19.65
		RB1#24	21.00	21.13	20.98	19.54	19.67	19.52
		RB15#0	20.12	20.11	20.14	18.66	18.65	18.68
		RB15#10	20.02	20.13	20.05	18.56	18.67	18.59
		RB25#0	20.01	20.09	20.04	18.55	18.63	18.58
	16QAM	RB1#0	19.85	20.33	20.09	18.39	18.87	18.63
		RB1#13	19.99	20.41	20.16	18.53	18.95	18.70
		RB1#24	19.90	20.32	20.06	18.44	18.86	18.60
		RB15#0	19.10	19.04	19.15	17.64	17.58	17.69
		RB15#10	18.99	19.09	19.03	17.53	17.63	17.57
		RB25#0	19.07	19.05	19.04	17.61	17.59	17.58
10.0	QPSK	RB1#0	21.02	21.10	21.11	19.56	19.64	19.65
		RB1#25	21.17	21.27	21.28	19.71	19.81	19.82
		RB1#49	21.04	21.12	21.08	19.58	19.66	19.62
		RB25#0	20.18	20.08	20.09	18.72	18.62	18.63
		RB25#25	20.12	20.11	20.05	18.66	18.65	18.59
		RB50#0	20.19	20.13	20.07	18.73	18.67	18.61
	16QAM	RB1#0	20.53	20.25	20.10	19.07	18.79	18.64
		RB1#25	20.78	20.39	20.24	19.32	18.93	18.78
		RB1#49	20.65	20.29	20.11	19.19	18.83	18.65
		RB25#0	19.15	19.09	19.13	17.69	17.63	17.67
		RB25#25	19.14	19.10	19.12	17.68	17.64	17.66
		RB50#0	19.14	19.12	19.05	17.68	17.66	17.59

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	20.94	21.04	21.01	19.48	19.58	19.55
		RB1#38	21.04	21.10	21.12	19.58	19.64	19.66
		RB1#74	20.96	21.02	20.99	19.50	19.56	19.53
		RB36#0	20.19	20.13	20.14	18.73	18.67	18.68
		RB36#39	20.17	20.15	20.16	18.71	18.69	18.70
		RB75#0	20.21	20.15	20.18	18.75	18.69	18.72
	16QAM	RB1#0	20.48	20.17	20.43	19.02	18.71	18.97
		RB1#38	20.71	20.28	20.50	19.25	18.82	19.04
		RB1#74	20.62	20.14	20.36	19.16	18.68	18.90
		RB36#0	19.18	19.14	19.13	17.72	17.68	17.67
		RB36#39	19.16	19.12	19.09	17.70	17.66	17.63
		RB75#0	19.20	19.10	19.12	17.74	17.64	17.66
20.0	QPSK	RB1#0	20.76	20.91	20.81	19.30	19.45	19.35
		RB1#50	21.28	21.32	21.27	19.82	19.86	19.81
		RB1#99	20.87	20.88	20.84	19.41	19.42	19.38
		RB50#0	20.25	20.08	20.19	18.79	18.62	18.73
		RB50#50	20.21	20.00	20.19	18.75	18.54	18.73
		RB100#0	20.26	20.03	20.16	18.80	18.57	18.70
	16QAM	RB1#0	20.05	20.14	20.43	18.59	18.68	18.97
		RB1#50	20.56	20.55	20.89	19.10	19.09	19.43
		RB1#99	20.21	20.10	20.41	18.75	18.64	18.95
		RB50#0	19.23	19.03	19.15	17.77	17.57	17.69
		RB50#50	19.21	18.97	19.17	17.75	17.51	17.71
		RB100#0	19.24	19.02	19.19	17.78	17.56	17.73

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

For Band2: Antenna Gain = -0.66dB

Cable Loss=0.8dB*(provided by the applicant)

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	19.09	19.15	19.27	17.56	17.62	17.74
		RB1#3	19.31	19.35	19.60	17.78	17.82	18.07
		RB1#5	19.07	19.16	19.28	17.54	17.63	17.75
		RB3#0	19.16	19.27	19.37	17.63	17.74	17.84
		RB3#3	19.18	19.30	19.42	17.65	17.77	17.89
		RB6#0	18.14	18.22	18.34	16.61	16.69	16.81
	16QAM	RB1#0	18.04	18.24	18.31	16.51	16.71	16.78
		RB1#3	18.26	18.45	18.55	16.73	16.92	17.02
		RB1#5	18.06	18.26	18.30	16.53	16.73	16.77
		RB3#0	18.37	18.27	18.47	16.84	16.74	16.94
		RB3#3	18.38	18.29	18.50	16.85	16.76	16.97
		RB6#0	17.19	17.29	17.37	15.66	15.76	15.84
3.0	QPSK	RB1#0	19.08	19.17	19.28	17.55	17.64	17.75
		RB1#8	19.04	19.21	19.30	17.51	17.68	17.77
		RB1#14	19.05	19.20	19.31	17.52	17.67	17.78
		RB6#0	18.04	18.09	18.21	16.51	16.56	16.68
		RB6#9	18.03	18.14	18.22	16.50	16.61	16.69
		RB15#0	18.09	18.15	18.31	16.56	16.62	16.78
	16QAM	RB1#0	18.69	18.32	18.31	17.16	16.79	16.78
		RB1#8	18.64	18.29	18.30	17.11	16.76	16.77
		RB1#14	18.65	18.31	18.28	17.12	16.78	16.75
		RB6#0	17.20	17.19	17.27	15.67	15.66	15.74
		RB6#9	17.14	17.22	17.24	15.61	15.69	15.71
		RB15#0	17.21	17.24	17.43	15.68	15.71	15.90

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	19.04	19.09	19.19	17.51	17.56	17.66
		RB1#13	19.15	19.22	19.29	17.62	17.69	17.76
		RB1#24	19.05	19.16	19.22	17.52	17.63	17.69
		RB15#0	18.11	18.09	18.32	16.58	16.56	16.79
		RB15#10	18.04	18.23	18.25	16.51	16.70	16.72
		RB25#0	18.05	18.16	18.28	16.52	16.63	16.75
	16QAM	RB1#0	17.89	18.38	18.23	16.36	16.85	16.70
		RB1#13	17.99	18.49	18.35	16.46	16.96	16.82
		RB1#24	17.90	18.38	18.29	16.37	16.85	16.76
		RB15#0	17.25	17.17	17.42	15.72	15.64	15.89
		RB15#10	17.17	17.28	17.38	15.64	15.75	15.85
		RB25#0	17.19	17.23	17.39	15.66	15.70	15.86
10.0	QPSK	RB1#0	19.06	19.19	19.21	17.53	17.66	17.68
		RB1#25	19.29	19.38	19.40	17.76	17.85	17.87
		RB1#49	19.08	19.24	19.29	17.55	17.71	17.76
		RB25#0	18.19	18.10	18.32	16.66	16.57	16.79
		RB25#25	18.10	18.29	18.22	16.57	16.76	16.69
		RB50#0	18.15	18.19	18.31	16.62	16.66	16.78
	16QAM	RB1#0	18.69	18.27	18.22	17.16	16.74	16.69
		RB1#25	18.86	18.44	18.39	17.33	16.91	16.86
		RB1#49	18.71	18.30	18.27	17.18	16.77	16.74
		RB25#0	17.30	17.21	17.52	15.77	15.68	15.99
		RB25#25	17.24	17.37	17.41	15.71	15.84	15.88
		RB50#0	17.24	17.28	17.39	15.71	15.75	15.86

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	18.97	19.12	19.11	17.44	17.59	17.58
		RB1#38	19.15	19.27	19.30	17.62	17.74	17.77
		RB1#74	19.02	19.08	19.21	17.49	17.55	17.68
		RB36#0	18.16	18.12	18.28	16.63	16.59	16.75
		RB36#39	18.17	18.24	18.24	16.64	16.71	16.71
		RB75#0	18.19	18.19	18.26	16.66	16.66	16.73
	16QAM	RB1#0	18.59	18.20	18.54	17.06	16.67	17.01
		RB1#38	18.77	18.35	18.71	17.24	16.82	17.18
		RB1#74	18.62	18.22	18.58	17.09	16.69	17.05
		RB36#0	17.27	17.22	17.35	15.74	15.69	15.82
		RB36#39	17.24	17.38	17.32	15.71	15.85	15.79
		RB75#0	17.26	17.27	17.31	15.73	15.74	15.78
20.0	QPSK	RB1#0	18.86	18.90	18.91	17.33	17.37	17.38
		RB1#50	19.32	19.37	19.43	17.79	17.84	17.90
		RB1#99	18.94	19.04	19.03	17.41	17.51	17.50
		RB50#0	18.21	18.07	18.27	16.68	16.54	16.74
		RB50#50	18.23	18.33	18.16	16.70	16.8	16.63
		RB100#0	18.25	18.19	18.23	16.72	16.66	16.70
	16QAM	RB1#0	18.12	18.11	18.54	16.59	16.58	17.01
		RB1#50	18.63	18.61	18.94	17.10	17.08	17.41
		RB1#99	18.23	18.22	18.66	16.70	16.69	17.13
		RB50#0	17.29	17.18	17.36	15.76	15.65	15.83
		RB50#50	17.29	17.40	17.24	15.76	15.87	15.71
		RB100#0	17.32	17.29	17.30	15.79	15.76	15.77

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

For Band4: Antenna Gain = -0.73dBi

Cable Loss=0.8dB*(provided by the applicant)

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	17.92	18.08	18.28	13.85	14.01	14.21
		RB1#3	18.07	18.26	18.54	14.00	14.19	14.47
		RB1#5	17.87	18.06	18.31	13.80	13.99	14.24
		RB3#0	17.94	18.11	18.43	13.87	14.04	14.36
		RB3#3	17.89	18.16	18.32	13.82	14.09	14.25
		RB6#0	17.09	17.20	17.38	13.02	13.13	13.31
	16QAM	RB1#0	16.88	17.13	17.23	12.81	13.06	13.16
		RB1#3	17.05	17.30	17.46	12.98	13.23	13.39
		RB1#5	16.89	17.20	17.30	12.82	13.13	13.23
		RB3#0	17.13	17.07	17.45	13.06	13.00	13.38
		RB3#3	17.10	17.13	17.46	13.03	13.06	13.39
		RB6#0	15.99	16.23	16.36	11.92	12.16	12.29
3.0	QPSK	RB1#0	17.92	18.05	18.34	13.85	13.98	14.27
		RB1#8	17.84	18.10	18.30	13.77	14.03	14.23
		RB1#14	17.89	18.15	18.33	13.82	14.08	14.26
		RB6#0	16.99	17.06	17.19	12.92	12.99	13.12
		RB6#9	16.92	17.12	17.30	12.85	13.05	13.23
		RB15#0	16.95	17.06	17.30	12.88	12.99	13.23
	16QAM	RB1#0	17.38	17.14	17.29	13.31	13.07	13.22
		RB1#8	17.41	17.18	17.27	13.34	13.11	13.20
		RB1#14	17.51	17.19	17.29	13.44	13.12	13.22
		RB6#0	15.98	16.09	16.20	11.91	12.02	12.13
		RB6#9	15.92	16.18	16.32	11.85	12.11	12.25
		RB15#0	15.95	16.04	16.41	11.88	11.97	12.34

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	17.85	18.03	18.16	13.78	13.96	14.09
		RB1#13	17.98	18.16	18.29	13.91	14.09	14.22
		RB1#24	17.93	18.04	18.24	13.86	13.97	14.17
		RB15#0	17.06	17.02	17.28	12.99	12.95	13.21
		RB15#10	16.95	17.04	17.43	12.88	12.97	13.36
		RB25#0	16.96	17.02	17.29	12.89	12.95	13.22
	16QAM	RB1#0	16.75	17.23	17.19	12.68	13.16	13.12
		RB1#13	16.88	17.32	17.34	12.81	13.25	13.27
		RB1#24	16.84	17.25	17.30	12.77	13.18	13.23
		RB15#0	16.02	16.01	16.32	11.95	11.94	12.25
		RB15#10	15.95	16.05	16.51	11.88	11.98	12.44
		RB25#0	15.98	16.02	16.38	11.91	11.95	12.31
10.0	QPSK	RB1#0	17.90	18.03	18.23	13.83	13.96	14.16
		RB1#25	18.22	18.30	18.45	14.15	14.23	14.38
		RB1#49	18.01	18.22	18.33	13.94	14.15	14.26
		RB25#0	17.14	17.08	17.39	13.07	13.01	13.32
		RB25#25	17.29	17.04	17.44	13.22	12.97	13.37
		RB50#0	17.20	17.01	17.42	13.13	12.94	13.35
	16QAM	RB1#0	17.43	17.18	17.09	13.36	13.11	13.02
		RB1#25	17.82	17.34	17.41	13.75	13.27	13.34
		RB1#49	17.62	17.22	17.32	13.55	13.15	13.25
		RB25#0	16.15	16.02	16.53	12.08	11.95	12.46
		RB25#25	16.27	16.06	16.58	12.20	11.99	12.51
		RB50#0	16.20	16.04	16.47	12.13	11.97	12.40

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

For Band5: Antenna Gain = -1.42dBi = -3.57dBd (0dBd=2.15dBi)

Cable Loss=0.5dB* (provided by the applicant)

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	19.52	19.47	19.24	17.94	17.89	17.66
		RB1#13	19.58	19.61	19.25	18.00	18.03	17.67
		RB1#24	19.47	19.48	19.03	17.89	17.90	17.45
		RB15#0	18.53	18.51	18.14	16.95	16.93	16.56
		RB15#10	18.58	18.56	18.19	17.00	16.98	16.61
		RB25#0	18.53	18.55	18.16	16.95	16.97	16.58
	16QAM	RB1#0	18.38	18.68	18.14	16.80	17.10	16.56
		RB1#13	18.43	18.87	18.21	16.85	17.29	16.63
		RB1#24	18.39	18.60	18.13	16.81	17.02	16.55
		RB15#0	17.72	17.53	17.17	16.14	15.95	15.59
		RB15#10	17.71	17.62	17.22	16.13	16.04	15.64
		RB25#0	17.72	17.59	17.17	16.14	16.01	15.59
10.0	QPSK	RB1#0	19.08	19.40	18.99	17.50	17.82	17.41
		RB1#25	19.20	19.23	19.24	17.62	17.65	17.66
		RB1#49	18.98	19.13	19.09	17.40	17.55	17.51
		RB25#0	18.39	18.15	18.14	16.81	16.57	16.56
		RB25#25	18.52	18.28	18.22	16.94	16.70	16.64
		RB50#0	18.54	18.25	18.18	16.96	16.67	16.60
	16QAM	RB1#0	18.80	18.22	18.09	17.22	16.64	16.51
		RB1#25	18.88	18.44	18.28	17.30	16.86	16.70
		RB1#49	18.71	18.28	18.14	17.13	16.70	16.56
		RB25#0	17.53	17.41	17.21	15.95	15.83	15.63
		RB25#25	17.75	17.48	17.31	16.17	15.90	15.73
		RB50#0	17.67	17.60	17.18	16.09	16.02	15.60

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power(dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	18.92	19.15	18.91	17.34	17.57	17.33
		RB1#38	19.03	19.09	19.10	17.45	17.51	17.52
		RB1#74	18.93	18.98	19.01	17.35	17.40	17.43
		RB36#0	18.09	18.08	18.15	16.51	16.50	16.57
		RB36#39	18.21	18.14	18.21	16.63	16.56	16.63
		RB75#0	18.18	18.15	18.21	16.60	16.57	16.63
	16QAM	RB1#0	18.63	18.18	18.42	17.05	16.60	16.84
		RB1#38	18.71	18.26	18.53	17.13	16.68	16.95
		RB1#74	18.60	18.15	18.43	17.02	16.57	16.85
		RB36#0	17.61	17.19	17.16	16.03	15.61	15.58
		RB36#39	17.54	17.46	17.21	15.96	15.88	15.63
		RB75#0	17.61	17.30	17.18	16.03	15.72	15.60
20.0	QPSK	RB1#0	18.83	18.80	18.74	17.25	17.22	17.16
		RB1#50	19.15	19.24	19.15	17.57	17.66	17.57
		RB1#99	18.81	18.85	18.85	17.23	17.27	17.27
		RB50#0	18.04	18.11	18.23	16.46	16.53	16.65
		RB50#50	18.02	18.13	18.18	16.44	16.55	16.60
		RB100#0	18.03	18.10	18.20	16.45	16.52	16.62
	16QAM	RB1#0	18.18	18.06	18.35	16.60	16.48	16.77
		RB1#50	18.57	18.51	18.82	16.99	16.93	17.24
		RB1#99	18.15	18.09	18.43	16.57	16.51	16.85
		RB50#0	17.04	17.02	17.23	15.46	15.44	15.65
		RB50#50	17.04	17.17	17.15	15.46	15.59	15.57
		RB100#0	17.11	17.12	17.18	15.53	15.54	15.60

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

For Band7: Antenna Gain = -0.58dBi

Cable Loss=1.0dB* (provided by the applicant)

Limit: EIRP ≤ 33dBm

LTE Band 12

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	17.59	17.47	17.54	13.24	13.12	13.19
		RB1#3	17.72	17.63	17.76	13.37	13.28	13.41
		RB1#5	17.49	17.48	17.53	13.14	13.13	13.18
		RB3#0	17.62	17.56	17.37	13.27	13.21	13.02
		RB3#3	17.48	17.58	17.43	13.13	13.23	13.08
		RB6#0	16.62	16.59	16.59	12.27	12.24	12.24
	16QAM	RB1#0	16.62	16.55	16.33	12.27	12.20	11.98
		RB1#3	16.72	16.77	16.52	12.37	12.42	12.17
		RB1#5	16.59	16.60	16.35	12.24	12.25	12.00
		RB3#0	16.83	16.46	16.42	12.48	12.11	12.07
		RB3#3	16.89	16.54	16.38	12.54	12.19	12.03
		RB6#0	15.63	15.58	15.33	11.28	11.23	10.98
3.0	QPSK	RB1#0	17.63	17.54	17.49	13.28	13.19	13.14
		RB1#8	17.58	17.50	17.60	13.23	13.15	13.25
		RB1#14	17.56	17.48	17.59	13.21	13.13	13.24
		RB6#0	16.57	16.53	16.40	12.22	12.18	12.05
		RB6#9	16.59	16.44	16.53	12.24	12.09	12.18
		RB15#0	16.59	16.52	16.46	12.24	12.17	12.11
	16QAM	RB1#0	17.25	16.59	16.47	12.90	12.24	12.12
		RB1#8	17.20	16.59	16.41	12.85	12.24	12.06
		RB1#14	17.18	16.63	16.34	12.83	12.28	11.99
		RB6#0	15.63	15.49	15.34	11.28	11.14	10.99
		RB6#9	15.62	15.47	15.32	11.27	11.12	10.97
		RB15#0	15.66	15.45	15.45	11.31	11.10	11.10

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	17.56	17.50	17.41	13.21	13.15	13.06
		RB1#13	17.65	17.52	17.51	13.30	13.17	13.16
		RB1#24	17.50	17.45	17.49	13.15	13.10	13.14
		RB15#0	16.55	16.63	16.44	12.20	12.28	12.09
		RB15#10	16.83	16.33	16.63	12.48	11.98	12.28
		RB25#0	16.68	16.47	16.51	12.33	12.12	12.16
	16QAM	RB1#0	16.46	16.63	16.46	12.11	12.28	12.11
		RB1#13	16.59	16.81	16.48	12.24	12.46	12.13
		RB1#24	16.35	16.75	16.34	12.00	12.40	11.99
		RB15#0	15.61	15.58	15.43	11.26	11.23	11.08
		RB15#10	15.87	15.29	15.60	11.52	10.94	11.25
		RB25#0	15.73	15.45	15.50	11.38	11.10	11.15
10.0	QPSK	RB1#0	17.58	17.55	17.54	13.23	13.20	13.19
		RB1#25	17.72	17.67	17.63	13.37	13.32	13.28
		RB1#49	17.51	17.50	17.62	13.16	13.15	13.27
		RB25#0	16.38	16.50	16.97	12.03	12.15	12.62
		RB25#25	16.43	16.34	16.78	12.08	11.99	12.43
		RB50#0	16.45	16.50	16.88	12.10	12.15	12.53
	16QAM	RB1#0	17.19	16.64	16.47	12.84	12.29	12.12
		RB1#25	17.14	16.77	16.65	12.79	12.42	12.30
		RB1#49	17.06	16.65	16.40	12.71	12.30	12.05
		RB25#0	15.40	15.42	16.08	11.05	11.07	11.73
		RB25#25	15.46	15.30	15.91	11.11	10.95	11.56
		RB50#0	15.41	15.41	15.89	11.06	11.06	11.54

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd) - Cable Loss(dB)
For Band12: Antenna Gain = -1.7dBi = -3.85dBd (0dBd=2.15dBi)
Cable Loss=0.5dB*(provided by the applicant)
Limit: ERP≤34.77dBm

LTE Band 17

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	17.47	17.52	17.42	13.12	13.17	13.07
		RB1#13	17.52	17.57	17.56	13.17	13.22	13.21
		RB1#24	17.48	17.47	17.44	13.13	13.12	13.09
		RB15#0	16.53	16.78	16.45	12.18	12.43	12.10
		RB15#10	16.40	16.53	16.68	12.05	12.18	12.33
		RB25#0	16.43	16.69	16.52	12.08	12.34	12.17
	16QAM	RB1#0	16.28	16.75	16.47	11.93	12.40	12.12
		RB1#13	16.38	16.92	16.53	12.03	12.57	12.18
		RB1#24	16.36	16.75	16.35	12.01	12.40	12.00
		RB15#0	15.51	15.80	15.46	11.16	11.45	11.11
		RB15#10	15.38	15.52	15.64	11.03	11.17	11.29
		RB25#0	15.42	15.65	15.50	11.07	11.30	11.15
10.0	QPSK	RB1#0	17.57	17.60	17.59	13.22	13.25	13.24
		RB1#25	17.73	17.70	17.68	13.38	13.35	13.33
		RB1#49	17.49	17.57	17.65	13.14	13.22	13.30
		RB25#0	16.83	17.03	17.02	12.48	12.68	12.67
		RB25#25	16.61	16.77	16.84	12.26	12.42	12.49
		RB50#0	16.77	16.88	16.97	12.42	12.53	12.62
	16QAM	RB1#0	16.97	16.61	16.51	12.62	12.26	12.16
		RB1#25	17.31	16.85	16.67	12.96	12.50	12.32
		RB1#49	16.98	16.57	16.42	12.63	12.22	12.07
		RB25#0	15.85	15.99	16.13	11.50	11.64	11.78
		RB25#25	15.65	15.81	15.92	11.30	11.46	11.57
		RB50#0	15.73	15.89	15.97	11.38	11.54	11.62

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd) - Cable Loss
For Band17: Antenna Gain = -1.7dBi = -3.85dBd (0dBd=2.15dBi)
Cable Loss=0.5dB*(provided by the applicant)
Limit: ERP≤34.77dBm

LTE Band 38

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	21.19	21.29	21.38	19.61	19.71	19.80
		RB1#13	21.34	21.44	21.55	19.76	19.86	19.97
		RB1#24	21.23	21.34	21.46	19.65	19.76	19.88
		RB15#0	20.24	20.33	20.47	18.66	18.75	18.89
		RB15#10	20.21	20.35	20.53	18.63	18.77	18.95
		RB25#0	20.22	20.37	20.48	18.64	18.79	18.90
	16QAM	RB1#0	20.40	20.28	20.44	18.82	18.70	18.86
		RB1#13	20.52	20.41	20.61	18.94	18.83	19.03
		RB1#24	20.45	20.33	20.49	18.87	18.75	18.91
		RB15#0	19.28	19.30	19.47	17.70	17.72	17.89
		RB15#10	19.25	19.27	19.54	17.67	17.69	17.96
		RB25#0	19.19	19.36	19.54	17.61	17.78	17.96
10.0	QPSK	RB1#0	21.23	21.35	21.49	19.65	19.77	19.91
		RB1#25	21.55	21.69	21.81	19.97	20.11	20.23
		RB1#49	21.31	21.42	21.54	19.73	19.84	19.96
		RB25#0	20.31	20.42	20.54	18.73	18.84	18.96
		RB25#25	20.27	20.42	20.54	18.69	18.84	18.96
		RB50#0	20.31	20.46	20.55	18.73	18.88	18.97
	16QAM	RB1#0	20.38	20.29	20.59	18.80	18.71	19.01
		RB1#25	20.74	20.60	20.90	19.16	19.02	19.32
		RB1#49	20.49	20.31	20.64	18.91	18.73	19.06
		RB25#0	19.30	19.44	19.50	17.72	17.86	17.92
		RB25#25	19.23	19.43	19.58	17.65	17.85	18.00
		RB50#0	19.26	19.41	19.54	17.68	17.83	17.96

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	21.14	21.23	21.36	19.56	19.65	19.78
		RB1#38	21.25	21.39	21.49	19.67	19.81	19.91
		RB1#74	21.20	21.36	21.44	19.62	19.78	19.86
		RB36#0	20.23	20.36	20.41	18.65	18.78	18.83
		RB36#39	20.27	20.35	20.47	18.69	18.77	18.89
		RB75#0	20.23	20.35	20.46	18.65	18.77	18.88
	16QAM	RB1#0	20.32	20.15	20.57	18.74	18.57	18.99
		RB1#38	20.41	20.33	20.75	18.83	18.75	19.17
		RB1#74	20.43	20.28	20.65	18.85	18.70	19.07
		RB36#0	19.20	19.31	19.46	17.62	17.73	17.88
		RB36#39	19.24	19.34	19.59	17.66	17.76	18.01
		RB75#0	19.13	19.31	19.46	17.55	17.73	17.88
20.0	QPSK	RB1#0	20.94	20.97	21.24	19.36	19.39	19.66
		RB1#50	21.51	21.56	21.80	19.93	19.98	20.22
		RB1#99	21.12	21.18	21.37	19.54	19.60	19.79
		RB50#0	20.20	20.30	20.40	18.62	18.72	18.82
		RB50#50	20.20	20.38	20.51	18.62	18.8	18.93
		RB100#0	20.20	20.32	20.42	18.62	18.74	18.84
	16QAM	RB1#0	20.01	19.94	20.43	18.43	18.36	18.85
		RB1#50	20.57	20.58	20.97	18.99	19.00	19.39
		RB1#99	20.16	20.17	20.57	18.58	18.59	18.99
		RB50#0	19.19	19.33	19.36	17.61	17.75	17.78
		RB50#50	19.14	19.38	19.47	17.56	17.80	17.89
		RB100#0	19.19	19.35	19.40	17.61	17.77	17.82

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

For Band38: Antenna Gain = -0.58dBi

Cable Loss=1.0dB* (provided by the applicant)

Limit: EIRP ≤ 33dBm

LTE Band 41

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	22.06	22.08	22.04	20.48	20.50	20.46
		RB1#13	22.17	22.21	22.17	20.59	20.63	20.59
		RB1#24	22.07	22.10	22.04	20.49	20.52	20.46
		RB15#0	21.09	21.20	21.09	19.51	19.62	19.51
		RB15#10	21.13	21.22	21.09	19.55	19.64	19.51
		RB25#0	21.12	21.15	21.10	19.54	19.57	19.52
	16QAM	RB1#0	21.30	21.07	21.11	19.72	19.49	19.53
		RB1#13	21.39	21.19	21.19	19.81	19.61	19.61
		RB1#24	21.30	21.12	21.05	19.72	19.54	19.47
		RB15#0	20.13	20.01	20.09	18.55	18.43	18.51
		RB15#10	20.16	20.11	20.12	18.58	18.53	18.54
		RB25#0	20.08	20.10	20.12	18.50	18.52	18.54
10.0	QPSK	RB1#0	22.02	22.17	22.15	20.44	20.59	20.57
		RB1#25	22.35	22.47	22.44	20.77	20.89	20.86
		RB1#49	22.06	22.19	22.13	20.48	20.61	20.55
		RB25#0	21.10	21.18	21.16	19.52	19.60	19.58
		RB25#25	21.17	21.17	21.13	19.59	19.59	19.55
		RB50#0	21.13	21.21	21.17	19.55	19.63	19.59
	16QAM	RB1#0	21.23	21.07	21.20	19.65	19.49	19.62
		RB1#25	21.53	21.35	21.51	19.95	19.77	19.93
		RB1#49	21.25	21.10	21.24	19.67	19.52	19.66
		RB25#0	20.07	20.21	20.15	18.49	18.63	18.57
		RB25#25	20.14	20.17	20.15	18.56	18.59	18.57
		RB50#0	20.11	20.18	20.15	18.53	18.60	18.57

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	22.01	22.07	22.15	20.43	20.49	20.57
		RB1#38	22.09	22.24	22.22	20.51	20.66	20.64
		RB1#74	21.99	22.11	22.07	20.41	20.53	20.49
		RB36#0	21.06	21.14	21.16	19.48	19.56	19.58
		RB36#39	21.12	21.13	21.20	19.54	19.55	19.62
		RB75#0	21.13	21.14	21.21	19.55	19.56	19.63
	16QAM	RB1#0	21.20	21.00	21.28	19.62	19.42	19.70
		RB1#38	21.29	21.15	21.41	19.71	19.57	19.83
		RB1#74	21.19	20.99	21.28	19.61	19.41	19.70
		RB36#0	20.05	20.13	20.20	18.47	18.55	18.62
		RB36#39	20.09	20.13	20.23	18.51	18.55	18.65
		RB75#0	20.07	20.08	20.12	18.49	18.50	18.54
20.0	QPSK	RB1#0	21.81	21.85	21.99	20.23	20.27	20.41
		RB1#50	22.34	22.42	22.52	20.76	20.84	20.94
		RB1#99	21.86	21.91	22.00	20.28	20.33	20.42
		RB50#0	21.03	21.12	21.10	19.45	19.54	19.52
		RB50#50	21.11	21.10	21.14	19.53	19.52	19.56
		RB100#0	21.09	21.11	21.13	19.51	19.53	19.55
	16QAM	RB1#0	20.86	20.81	21.20	19.28	19.23	19.62
		RB1#50	21.40	21.40	21.69	19.82	19.82	20.11
		RB1#99	20.92	20.88	21.20	19.34	19.30	19.62
		RB50#0	19.99	20.18	20.10	18.41	18.60	18.52
		RB50#50	20.12	20.17	20.16	18.54	18.59	18.58
		RB100#0	20.08	20.08	20.09	18.50	18.50	18.51

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

For Band41: Antenna Gain = -0.58dBi

Cable Loss=1.0dB* (provided by the applicant)

Limit: EIRP ≤ 33dBm

LTE Band 66:

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	19.07	19.24	19.41	17.54	17.71	17.88
		RB1#3	19.31	19.41	19.67	17.78	17.88	18.14
		RB1#5	19.07	19.24	19.44	17.54	17.71	17.91
		RB3#0	19.17	19.24	19.54	17.64	17.71	18.01
		RB3#3	19.17	19.30	19.59	17.64	17.77	18.06
		RB6#0	18.13	18.25	18.50	16.60	16.72	16.97
	16QAM	RB1#0	18.05	18.32	18.43	16.52	16.79	16.90
		RB1#3	18.19	18.59	18.63	16.66	17.06	17.10
		RB1#5	18.07	18.32	18.44	16.54	16.79	16.91
		RB3#0	18.36	18.31	18.62	16.83	16.78	17.09
		RB3#3	18.41	18.35	18.63	16.88	16.82	17.10
		RB6#0	17.20	17.40	17.50	15.67	15.87	15.97
3.0	QPSK	RB1#0	19.08	19.29	19.49	17.55	17.76	17.96
		RB1#8	19.10	19.31	19.47	17.57	17.78	17.94
		RB1#14	19.10	19.29	19.49	17.57	17.76	17.96
		RB6#0	18.06	18.19	18.42	16.53	16.66	16.89
		RB6#9	18.06	18.21	18.42	16.53	16.68	16.89
		RB15#0	18.13	18.27	18.49	16.60	16.74	16.96
	16QAM	RB1#0	18.75	18.36	18.50	17.22	16.83	16.97
		RB1#8	18.69	18.40	18.52	17.16	16.87	16.99
		RB1#14	18.70	18.38	18.46	17.17	16.85	16.93
		RB6#0	17.25	17.29	17.46	15.72	15.76	15.93
		RB6#9	17.17	17.34	17.44	15.64	15.81	15.91
		RB15#0	17.27	17.30	17.62	15.74	15.77	16.09

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	19.05	19.19	19.39	17.52	17.66	17.86
		RB1#13	19.17	19.31	19.54	17.64	17.78	18.01
		RB1#24	19.07	19.21	19.41	17.54	17.68	17.88
		RB15#0	18.17	18.27	18.46	16.64	16.74	16.93
		RB15#10	18.07	18.22	18.45	16.54	16.69	16.92
		RB25#0	18.10	18.23	18.44	16.57	16.70	16.91
	16QAM	RB1#0	17.94	18.46	18.46	16.41	16.93	16.93
		RB1#13	18.07	18.57	18.56	16.54	17.04	17.03
		RB1#24	17.95	18.51	18.50	16.42	16.98	16.97
		RB15#0	17.33	17.37	17.61	15.80	15.84	16.08
		RB15#10	17.17	17.30	17.61	15.64	15.77	16.08
		RB25#0	17.23	17.31	17.57	15.70	15.78	16.04
10.0	QPSK	RB1#0	19.08	19.27	19.39	17.55	17.74	17.86
		RB1#25	19.28	19.47	19.60	17.75	17.94	18.07
		RB1#49	19.15	19.30	19.48	17.62	17.77	17.95
		RB25#0	18.26	18.32	18.39	16.73	16.79	16.86
		RB25#25	18.12	18.22	18.48	16.59	16.69	16.95
		RB50#0	18.21	18.29	18.47	16.68	16.76	16.94
	16QAM	RB1#0	18.72	18.40	18.39	17.19	16.87	16.86
		RB1#25	18.92	18.57	18.60	17.39	17.04	17.07
		RB1#49	18.75	18.42	18.47	17.22	16.89	16.94
		RB25#0	17.39	17.44	17.56	15.86	15.91	16.03
		RB25#25	17.20	17.37	17.65	15.67	15.84	16.12
		RB50#0	17.30	17.39	17.58	15.77	15.86	16.05

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	19.03	19.22	19.32	17.50	17.69	17.79
		RB1#38	19.17	19.36	19.51	17.64	17.83	17.98
		RB1#74	19.11	19.23	19.43	17.58	17.70	17.90
		RB36#0	18.23	18.31	18.45	16.70	16.78	16.92
		RB36#39	18.23	18.26	18.51	16.70	16.73	16.98
		RB75#0	18.23	18.29	18.50	16.70	16.76	16.97
	16QAM	RB1#0	18.67	18.32	18.73	17.14	16.79	17.20
		RB1#38	18.81	18.50	18.92	17.28	16.97	17.39
		RB1#74	18.76	18.35	18.79	17.23	16.82	17.26
		RB36#0	17.34	17.40	17.51	15.81	15.87	15.98
		RB36#39	17.31	17.39	17.58	15.78	15.86	16.05
		RB75#0	17.32	17.37	17.54	15.79	15.84	16.01
20.0	QPSK	RB1#0	18.90	19.04	19.05	17.37	17.51	17.52
		RB1#50	19.34	19.53	19.57	17.81	18.00	18.04
		RB1#99	18.99	19.13	19.19	17.46	17.60	17.66
		RB50#0	18.34	18.32	18.47	16.81	16.79	16.94
		RB50#50	18.31	18.20	18.50	16.78	16.67	16.97
		RB100#0	18.29	18.22	18.49	16.76	16.69	16.96
	16QAM	RB1#0	18.18	18.23	18.66	16.65	16.70	17.13
		RB1#50	18.69	18.69	19.19	17.16	17.16	17.66
		RB1#99	18.26	18.33	18.79	16.73	16.80	17.26
		RB50#0	17.39	17.37	17.53	15.86	15.84	16.00
		RB50#50	17.41	17.28	17.59	15.88	15.75	16.06
		RB100#0	17.42	17.32	17.57	15.89	15.79	16.04

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

For Band 66: Antenna Gain = -0.73dBi

Cable Loss=0.8dB* (provided by the applicant)

Limit: EIRP ≤ 30dBm

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

Mode	Channel	PAR (dB)	Limit(dB)
GSM	Low	3.62	13
	Middle	3.54	13
	High	3.41	13

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

Mode	Channel	PAR (dB)	Limit (dB)
RMC (BPSK)	Low	3.53	13
	Middle	3.42	13
	High	3.44	13
HSDPA (16QAM)	Low	3.57	13
	Middle	3.62	13
	High	3.61	13
HSUPA (BPSK)	Low	3.43	13
	Middle	3.47	13
	High	3.55	13
HSPA+	Low	3.52	13
	Middle	3.54	13
	High	3.56	13

PCS Band

Mode	Channel	PAR (dB)	Limit(dB)
GSM	Low	3.53	13
	Middle	3.56	13
	High	3.54	13

Mode	Channel	PAR (dB)	Limit(dB)
EGPRS	Low	3.56	13
	Middle	3.53	13
	High	3.47	13

Mode	Channel	PAR (dB)	Limit (dB)
RMC (BPSK)	Low	3.47	13
	Middle	3.54	13
	High	3.46	13
HSDPA (16QAM)	Low	3.56	13
	Middle	3.52	13
	High	3.45	13
HSUPA (BPSK)	Low	3.44	13
	Middle	3.46	13
	High	3.47	13
HSPA+	Low	3.46	13
	Middle	3.54	13
	High	3.52	13

AWS Band

Mode	Channel	PAR (dB)	Limit (dB)
RMC (BPSK)	Low	3.47	13
	Middle	3.62	13
	High	3.57	13
HSDPA (16QAM)	Low	3.52	13
	Middle	3.56	13
	High	3.55	13
HSUPA (BPSK)	Low	3.67	13
	Middle	3.52	13
	High	3.66	13
HSPA+	Low	3.54	13
	Middle	3.62	13
	High	3.60	13

LTE Band 2 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	8.49	5.45	4.65	13	Pass
QPSK (100RB Size)	5.61	5.51	5.45	13	Pass
16QAM (1RB Size)	6.38	6.44	5.61	13	Pass
16QAM (100RB Size)	6.44	6.44	6.35	13	Pass

LTE Band 4 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	5.19	5.61	5.61	13	Pass
QPSK (100RB Size)	5.58	5.67	5.61	13	Pass
16QAM (1RB Size)	6.03	6.35	6.89	13	Pass
16QAM (100RB Size)	6.51	6.47	6.63	13	Pass

LTE Band 5 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	4.26	3.88	4.07	13	Pass
QPSK (50RB Size)	5.26	5.29	5.35	13	Pass
16QAM (1RB Size)	5.32	4.58	4.90	13	Pass
16QAM (50RB Size)	6.12	6.12	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)	4.81	5.03	4.97	13	Pass
QPSK (100RB Size)	5.64	5.58	5.51	13	Pass
16QAM (1RB Size)	5.29	5.93	5.67	13	Pass
16QAM (100RB Size)	6.38	6.44	6.41	13	Pass

LTE Band 12 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	3.88	4.58	4.49	13	Pass
QPSK (50RB Size)	5.51	5.48	5.42	13	Pass
16QAM (1RB Size)	4.97	5.38	5.42	13	Pass
16QAM (50RB Size)	6.35	6.28	6.35	13	Pass

LTE Band 17 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	4.74	4.49	4.49	13	Pass
QPSK (50RB Size)	5.42	5.42	5.54	13	Pass
16QAM (1RB Size)	6.70	5.10	5.16	13	Pass
16QAM (50RB Size)	6.28	6.31	6.35	13	Pass

LTE Band 38 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	6.06	9.01	8.23	13	Pass
QPSK (100RB Size)	8.01	9.86	8.08	13	Pass
16QAM (1RB Size)	8.56	9.23	8.27	13	Pass
16QAM (100RB Size)	9.58	9.24	9.61	13	Pass

LTE Band 41 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	9.72	8.24	9.65	13	Pass
QPSK (100RB Size)	7.26	7.44	7.53	13	Pass
16QAM (1RB Size)	10.10	8.78	8.21	13	Pass
16QAM (100RB Size)	11.25	8.81	9.46	13	Pass

LTE Band 66 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	5.45	5.54	5.38	13	Pass
QPSK (100RB Size)	5.64	5.67	5.54	13	Pass
16QAM (1RB Size)	6.86	6.92	6.03	13	Pass
16QAM (100RB Size)	6.51	6.47	6.44	13	Pass

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

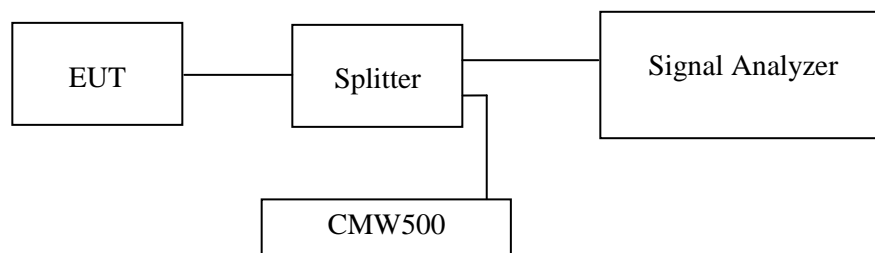
Applicable Standard

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

Test Procedure

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

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



Test Data

Environmental Conditions

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

The testing was performed by Gala Liu from 2022-03-02 to 2022-03-22.

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	317.31
	190	836.6	250.00	314.10
	251	848.8	246.79	312.50
EGPRS(8PSK)	128	824.2	248.40	315.71
	190	836.6	253.21	320.51
	251	848.8	245.19	315.71

	Frequency (MHz)	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
RMC	826.4	4.25	6.76
	836.6	4.21	5.35
	846.6	4.18	4.73
HSDPA	826.4	4.21	4.90
	836.6	4.20	4.90
	846.6	4.21	5.08
HSUPA	826.4	4.17	4.70
	836.6	4.15	4.70
	846.6	4.17	4.70

PCS Band (Part 24E)

Mode	Channel	Frequency (MHz)	99% Occupied Bandwidth (kHz)	26 dB Emission Bandwidth (kHz)
GSM (GMSK)	512	1850.2	245.19	312.50
	661	1880.0	243.59	314.10
	810	1909.8	243.59	317.31
EGPRS(8PSK)	512	1850.2	253.21	322.12
	661	1880.0	250.00	318.91
	810	1909.8	248.40	323.72

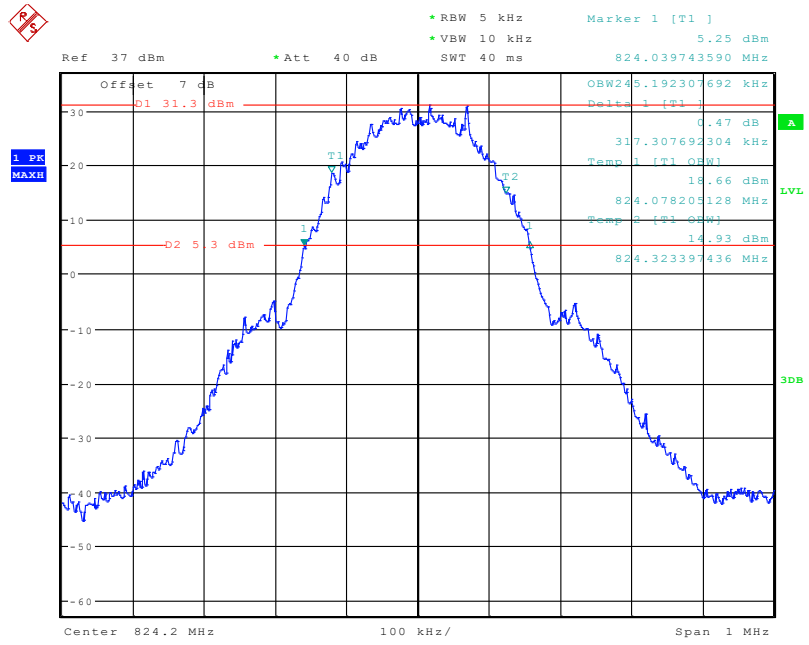
	Frequency (MHz)	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
RMC	1852.4	4.17	4.71
	1880.0	4.17	4.73
	1907.6	4.15	4.71
HSDPA	1852.4	4.20	4.73
	1880.0	4.21	5.02
	1907.6	4.20	4.74
HSUPA	1852.4	4.18	4.73
	1880.0	4.20	5.06
	1907.6	4.18	4.73

AWS Band (Part 27)

	Frequency (MHz)	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
RMC	1712.4	4.18	4.71
	1732.6	4.18	4.70
	1752.6	4.17	4.71
HSDPA	1712.4	4.25	5.71
	1732.6	4.23	5.66
	1752.6	4.23	5.79
HSUPA	1712.4	4.18	5.02
	1732.6	4.17	4.73
	1752.6	4.17	4.71

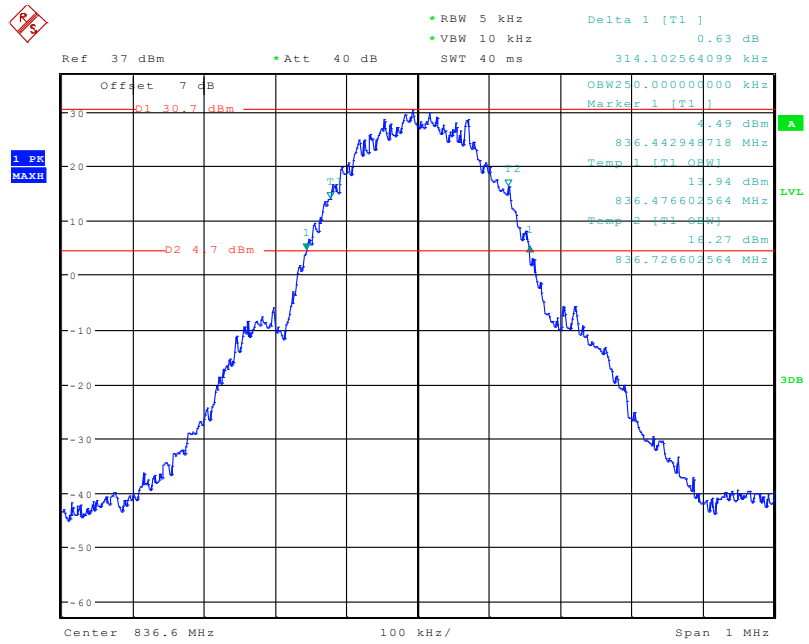
Cellular Band (Part 22H)

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



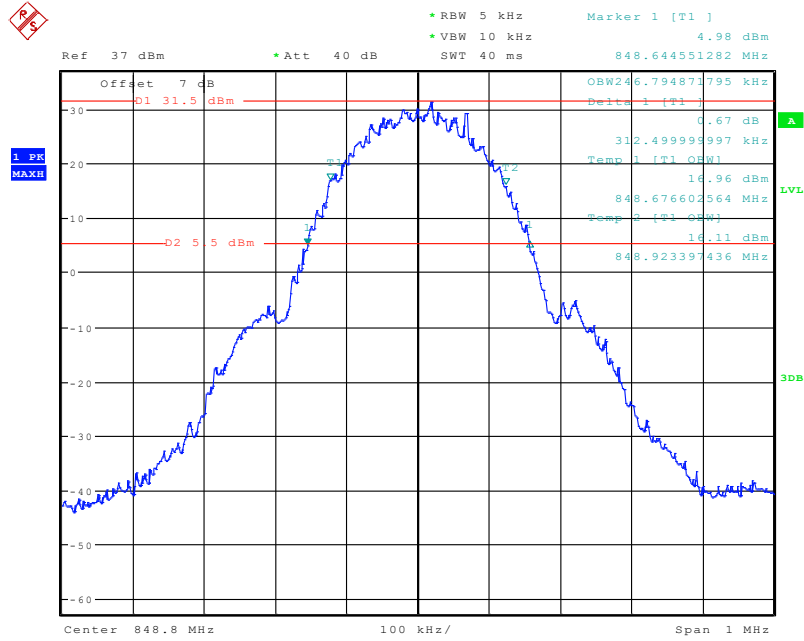
Date: 3.MAR.2022 10:46:51

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



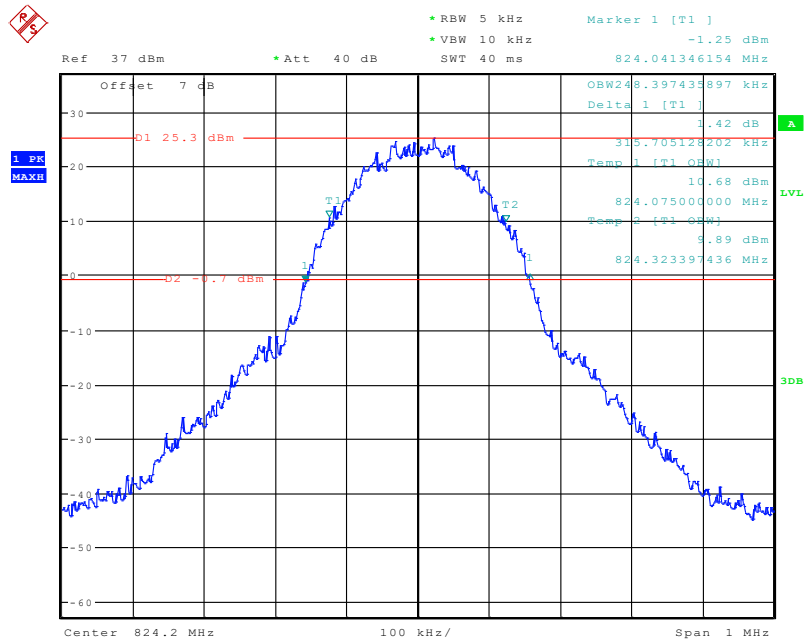
Date: 3.MAR.2022 10:48:45

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



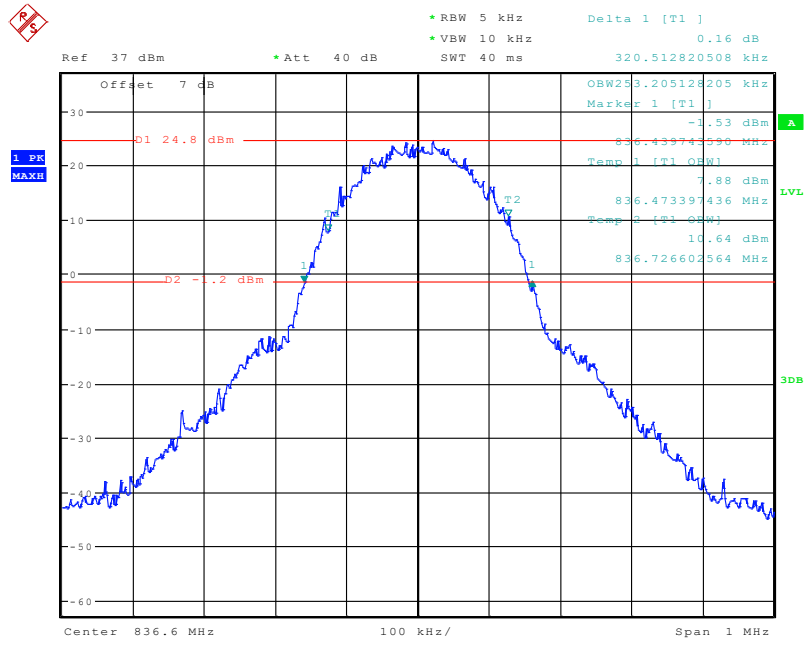
Date: 3.MAR.2022 10:49:56

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



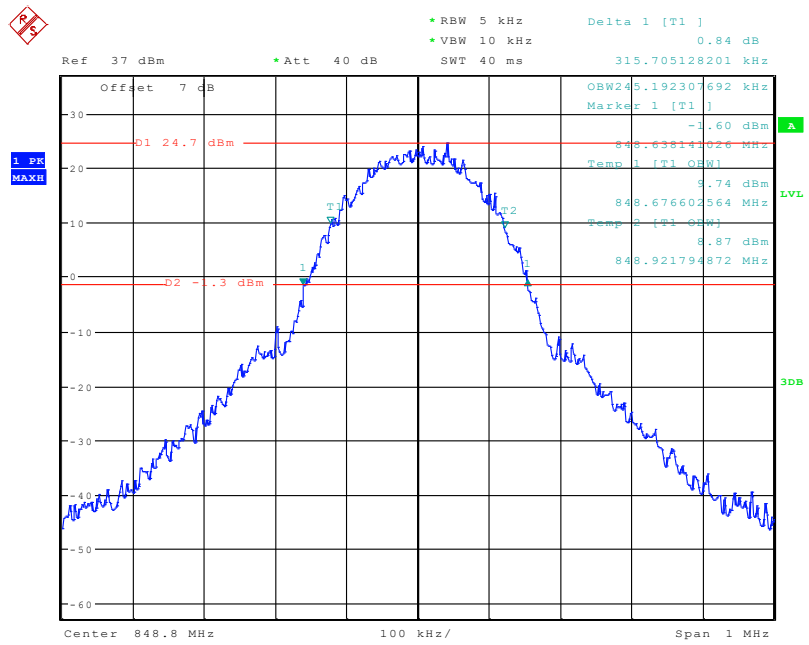
Date: 3.MAR.2022 11:00:05

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



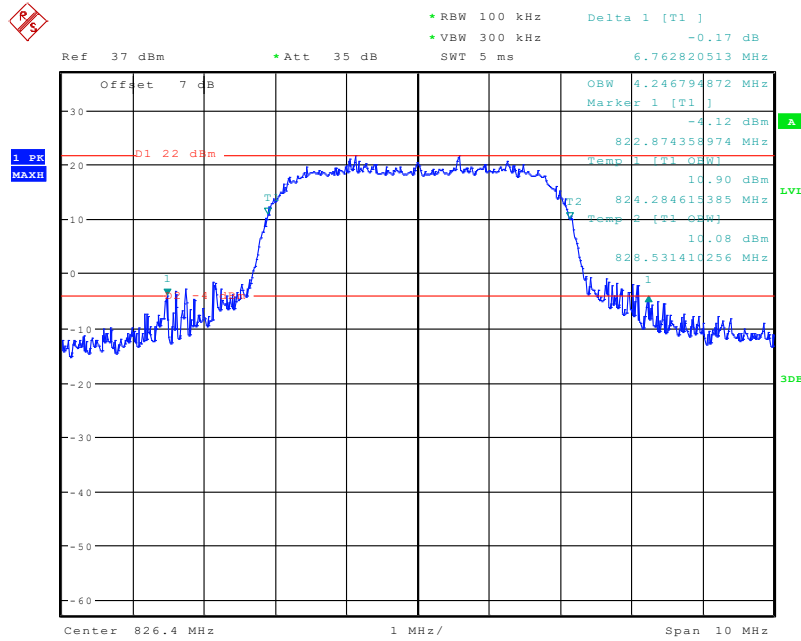
Date: 3.MAR.2022 10:59:07

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



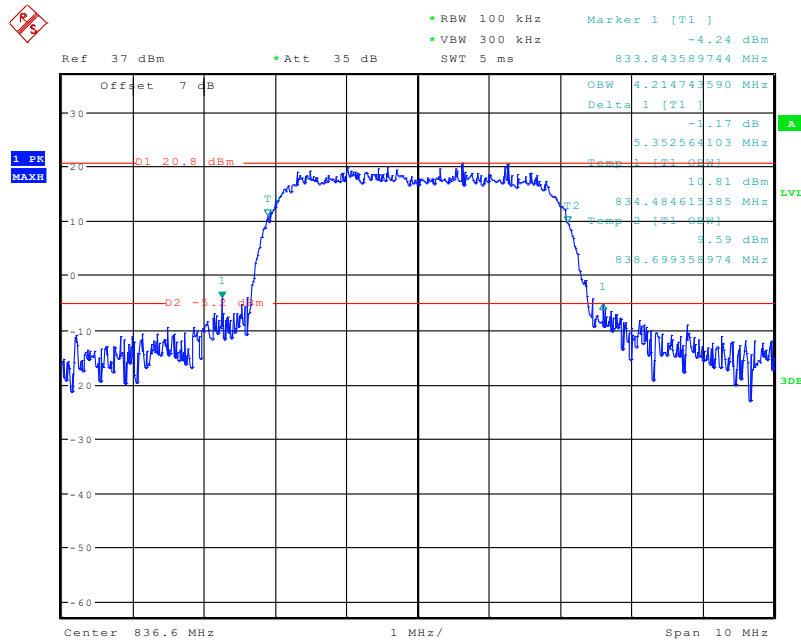
Date: 3.MAR.2022 10:57:17

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



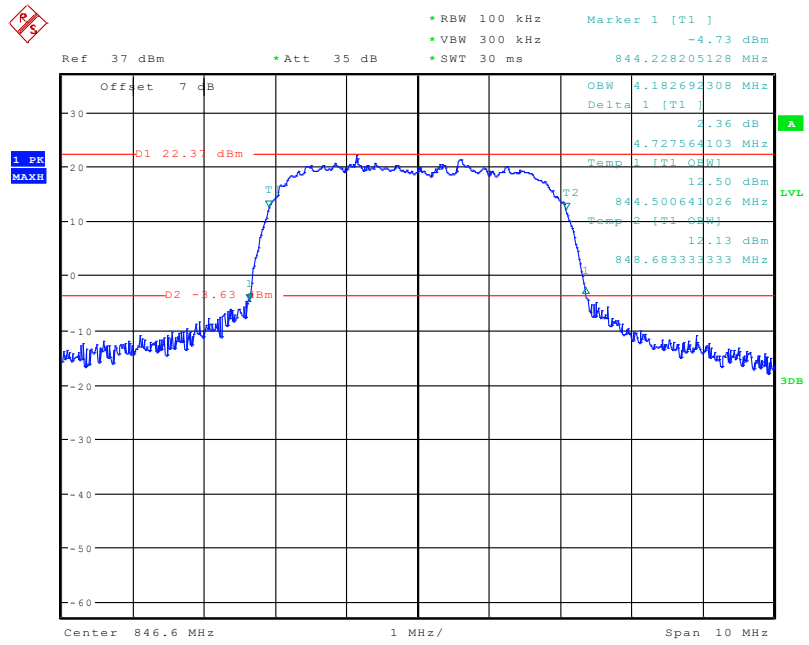
Date: 3.MAR.2022 09:20:55

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



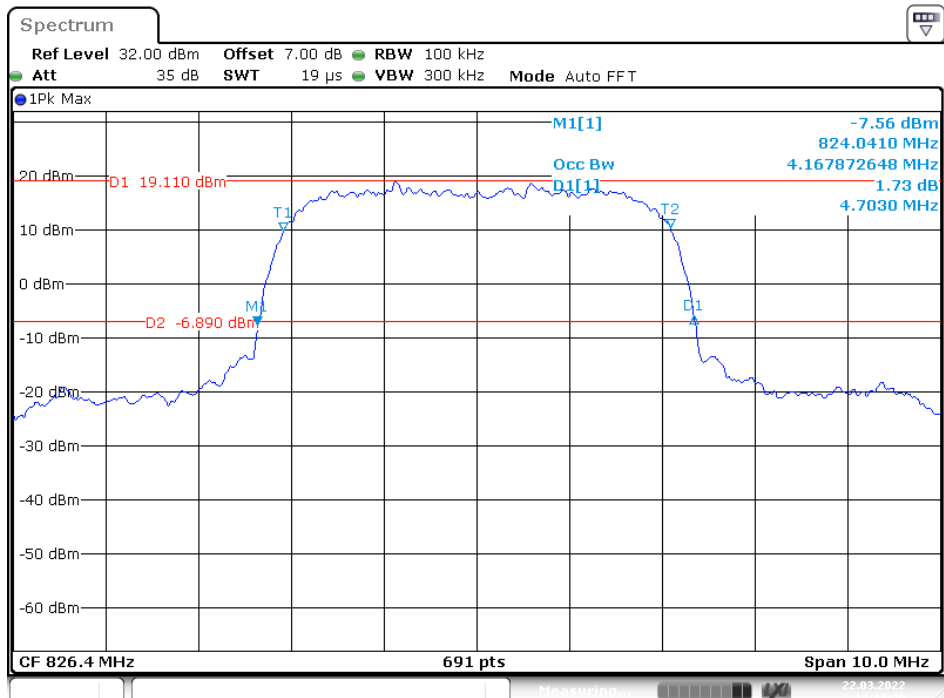
Date: 3.MAR.2022 09:21:52

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



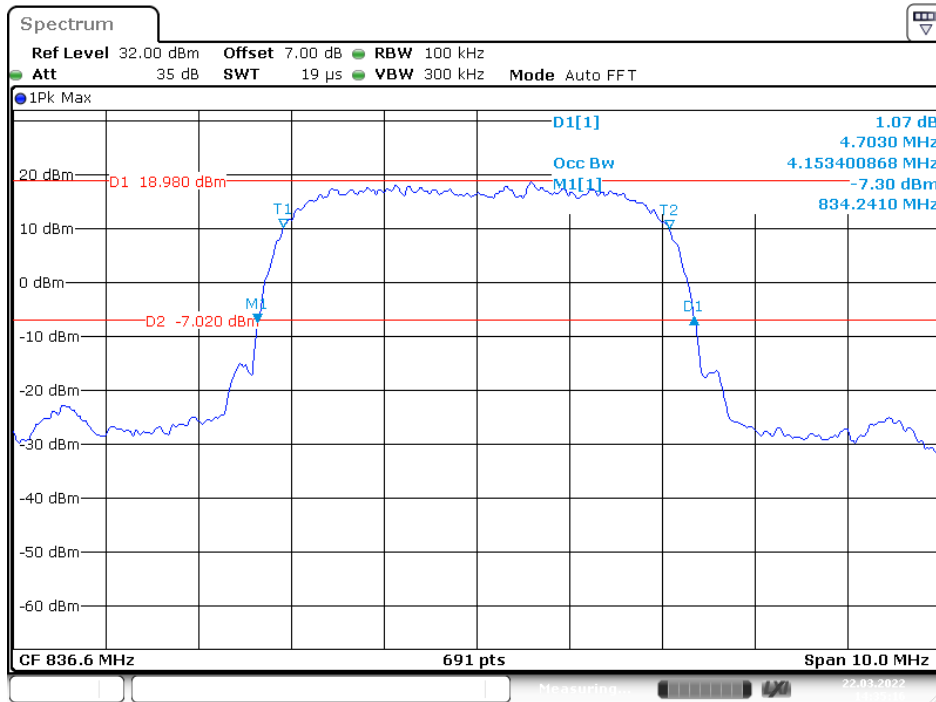
Date: 3.MAR.2022 09:47:50

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

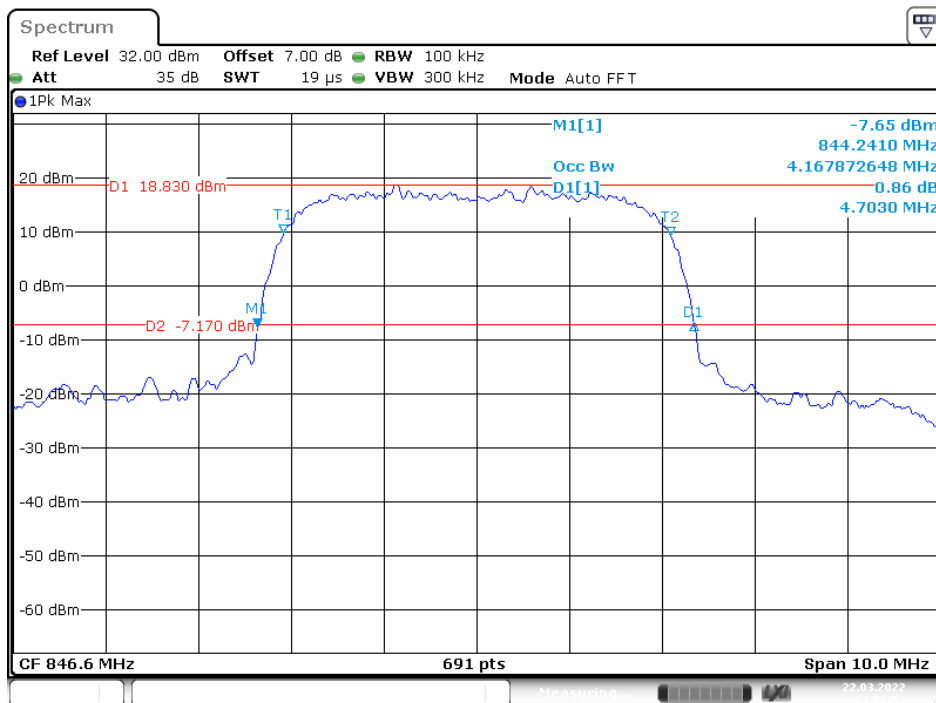


Date: 22.MAR.2022 14:33:40

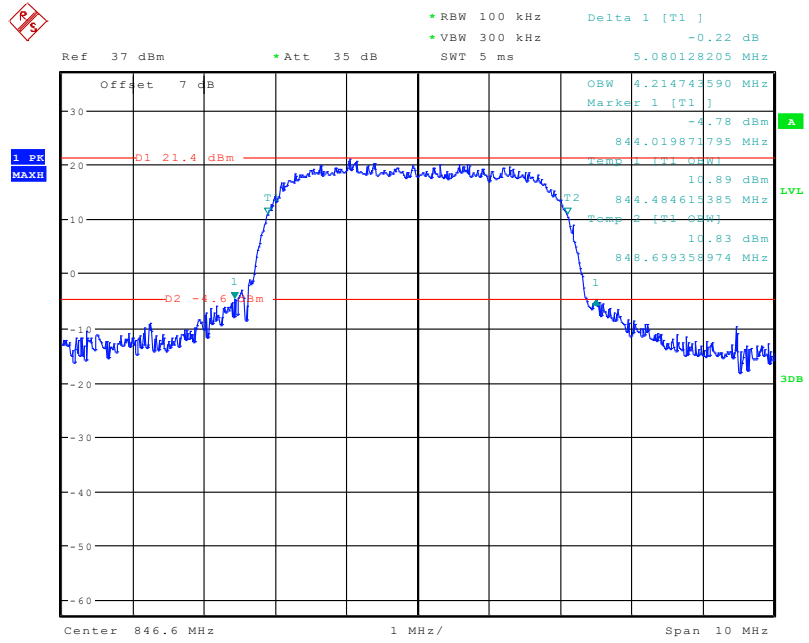
26 dB Emissions & 99% Occupied Bandwidth for HSUPA (BPSK) Mode, Middle channel



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



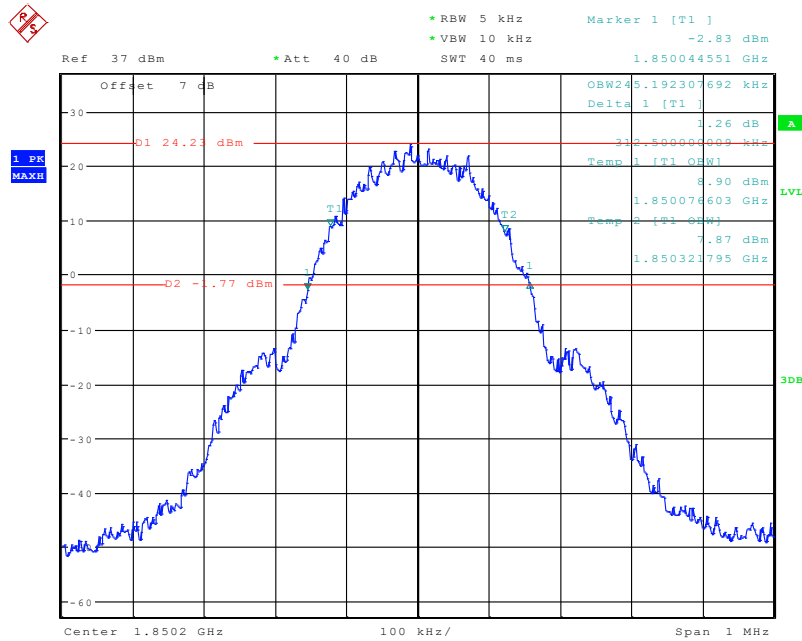
26 dB Emissions & 99% Occupied Bandwidth for HSDPA (16QAM) Mode, High channel



Date: 3.MAR.2022 09:23:06

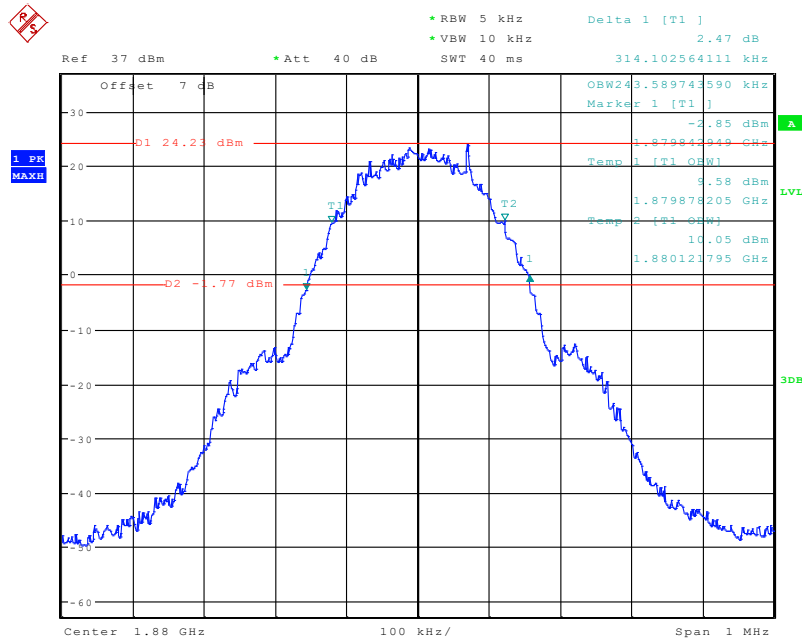
PCS Band (Part 24E)

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



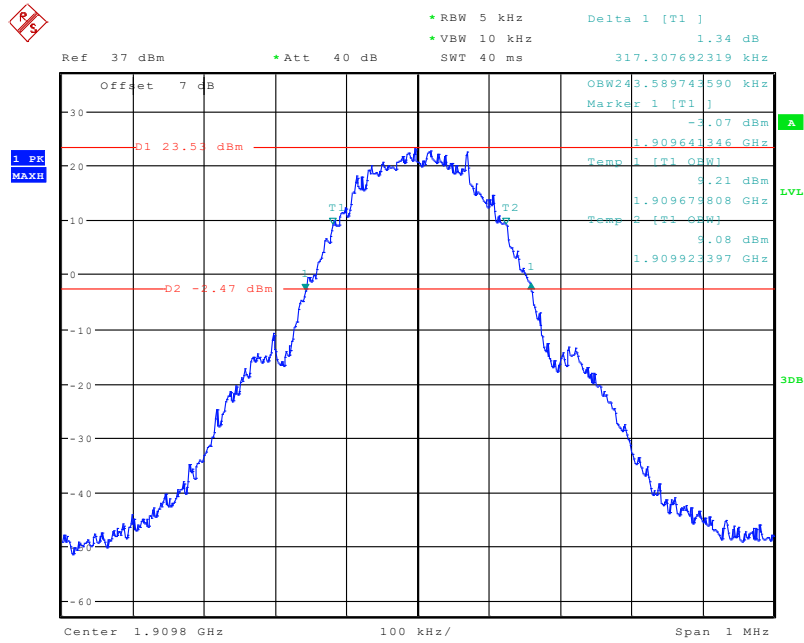
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26 dB Emissions & 99% Occupied Bandwidth for GSM (GMSK) Mode, Middle channel



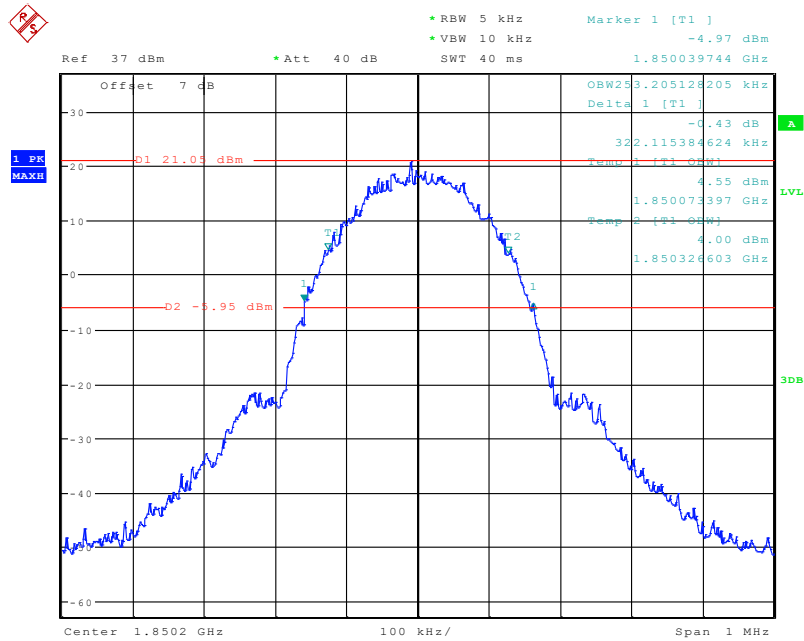
Date: 3.MAR.2022 11:13:41

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



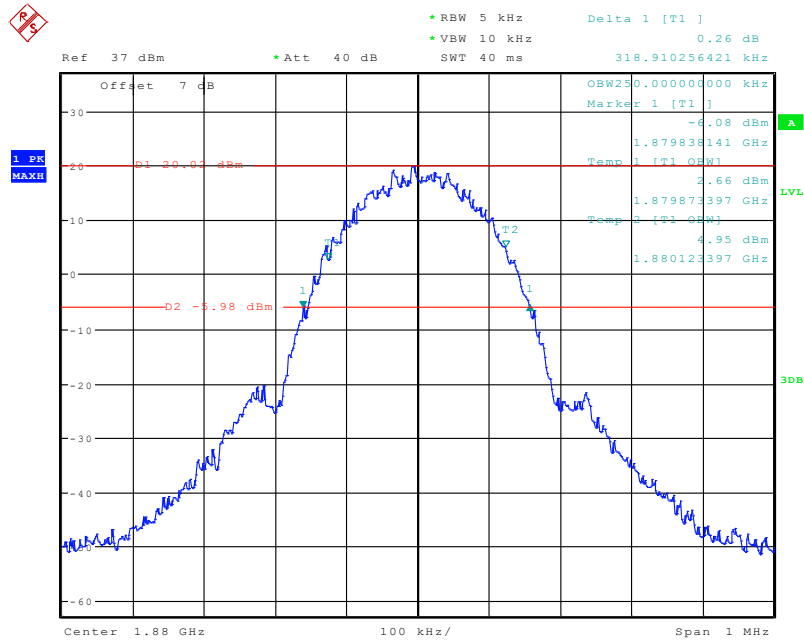
Date: 3.MAR.2022 11:12:14

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



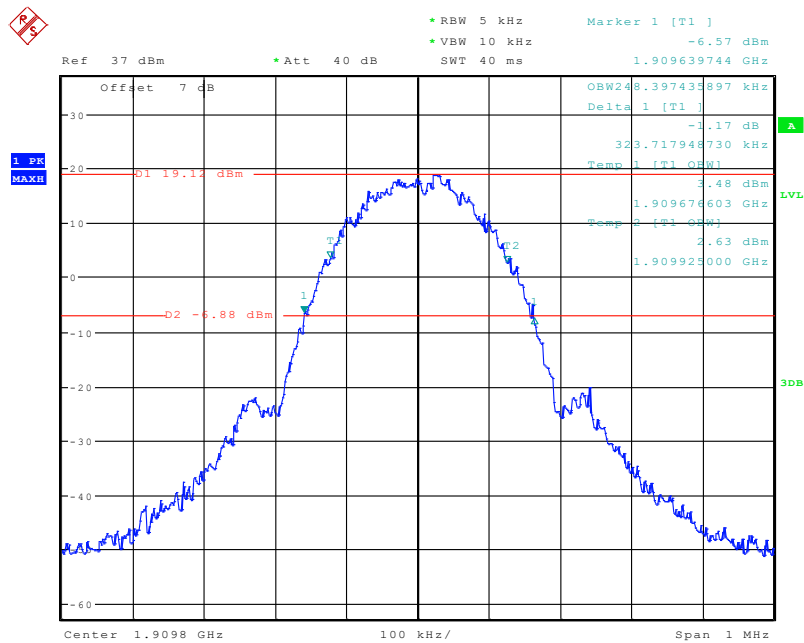
Date: 3.MAR.2022 11:04:35

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



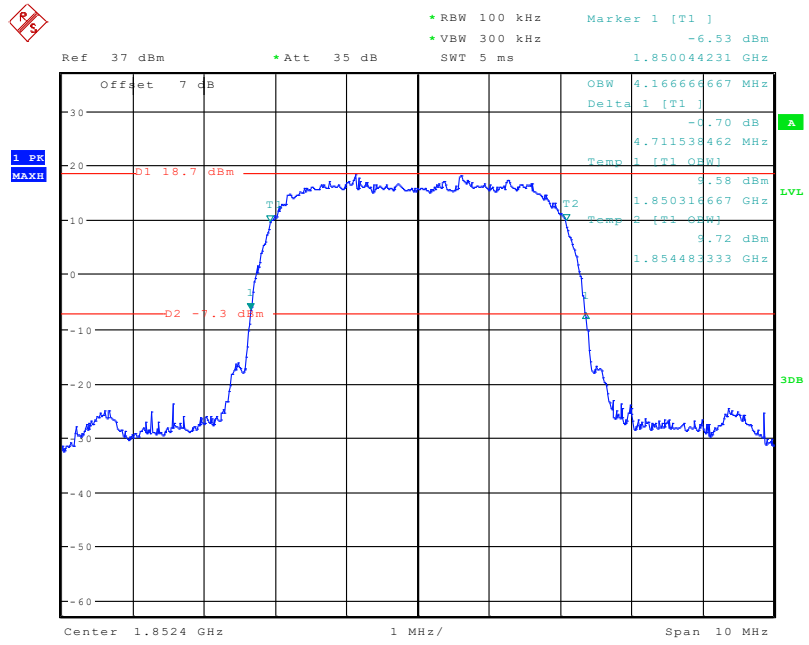
Date: 3.MAR.2022 11:05:46

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



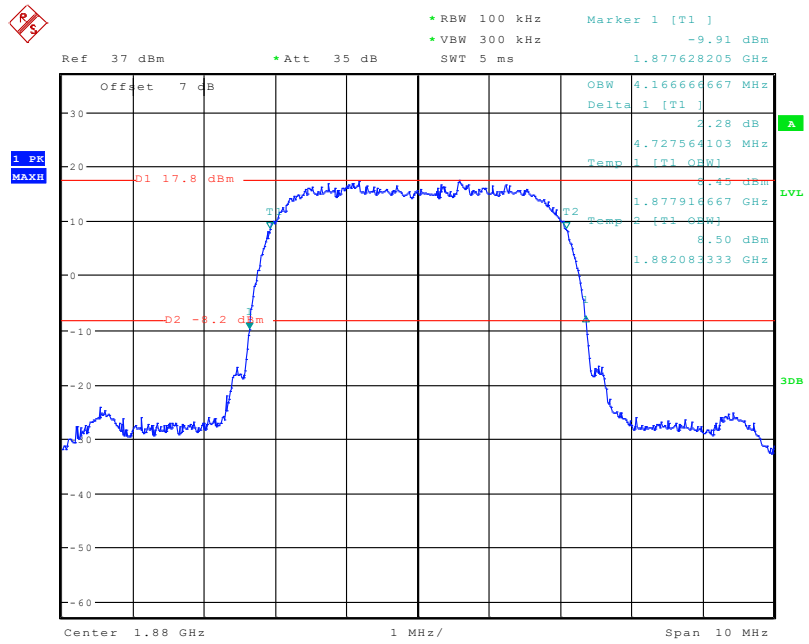
Date: 3.MAR.2022 11:06:31

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



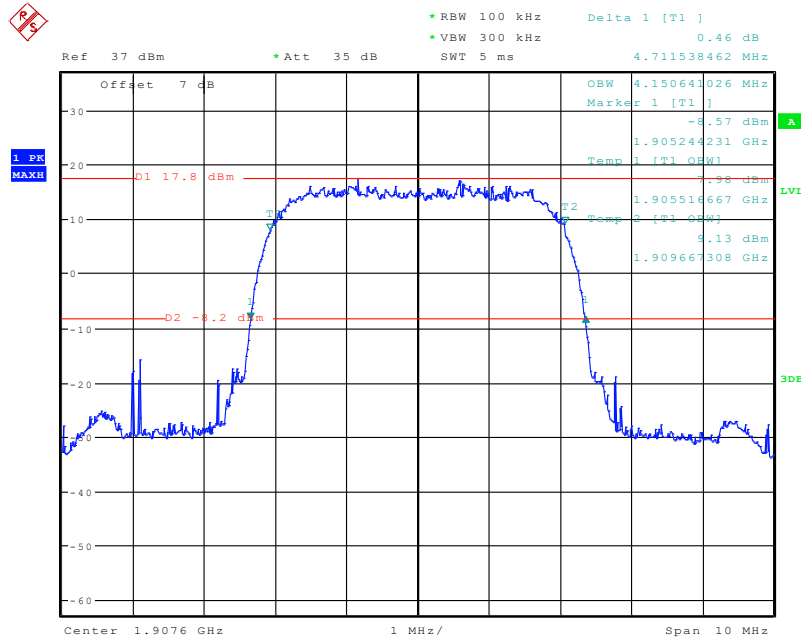
Date: 3.MAR.2022 09:08:39

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



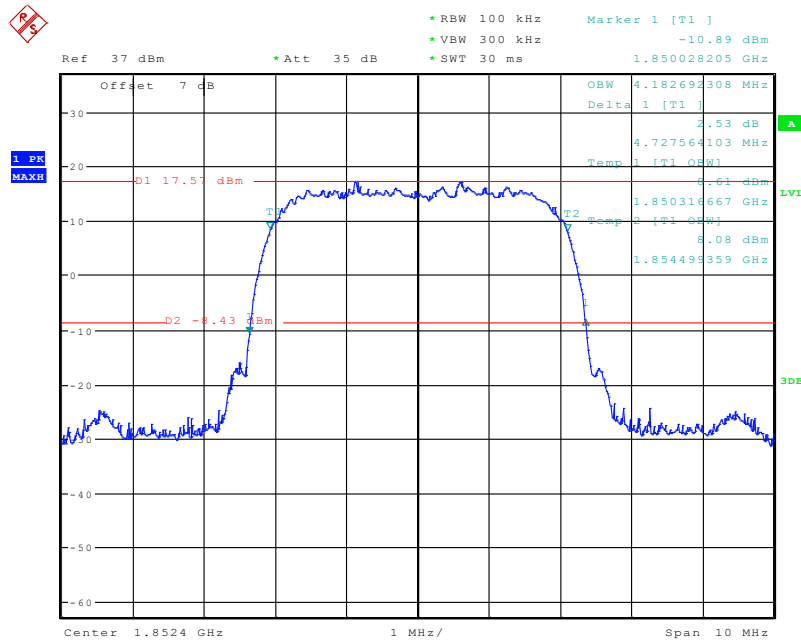
Date: 3.MAR.2022 09:09:32

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



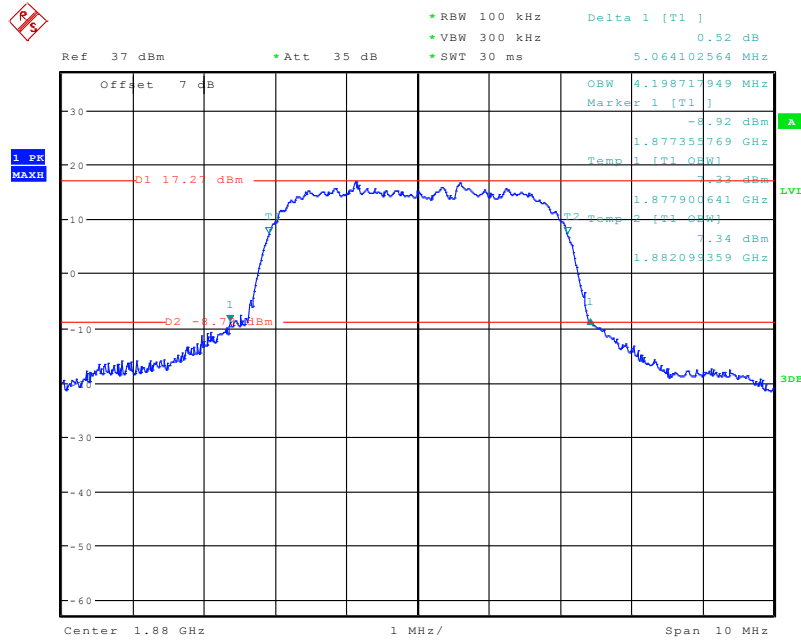
Date: 3.MAR.2022 09:10:25

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



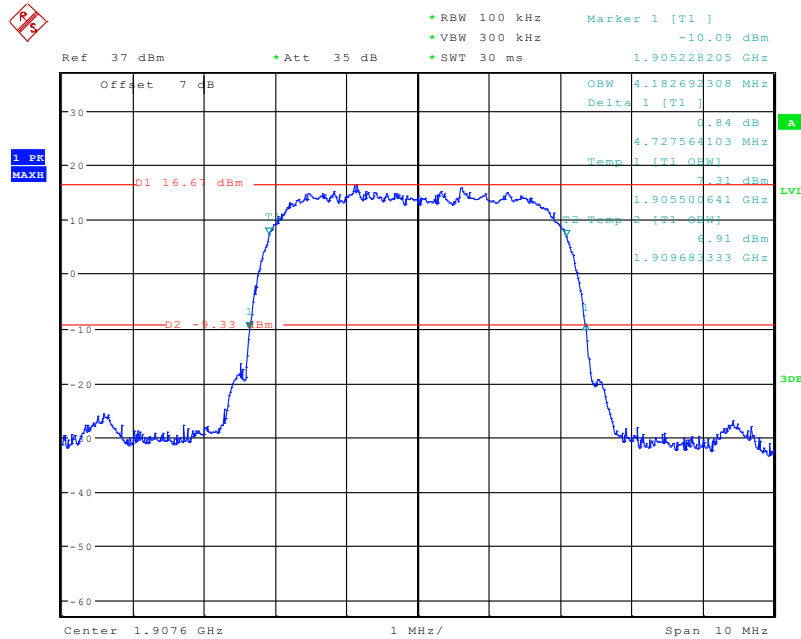
Date: 3.MAR.2022 09:51:49

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



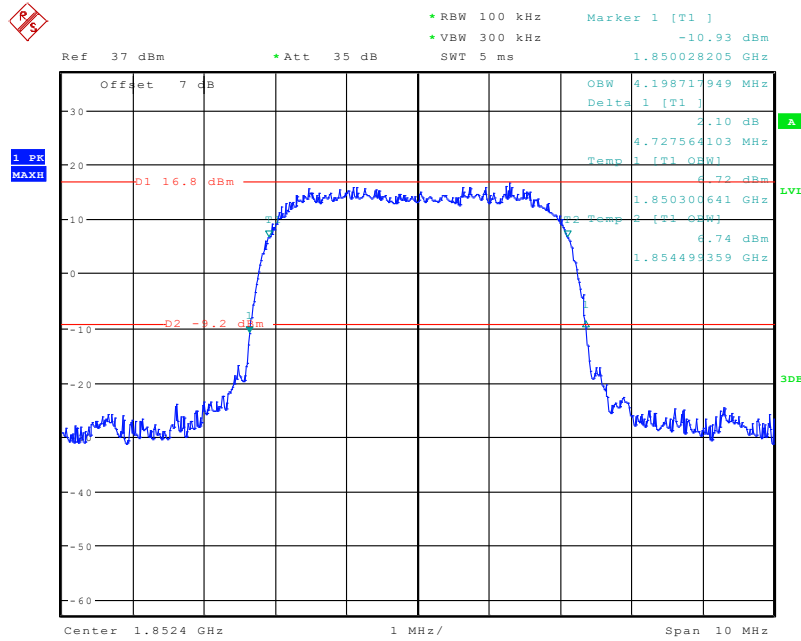
Date: 3.MAR.2022 09:53:17

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



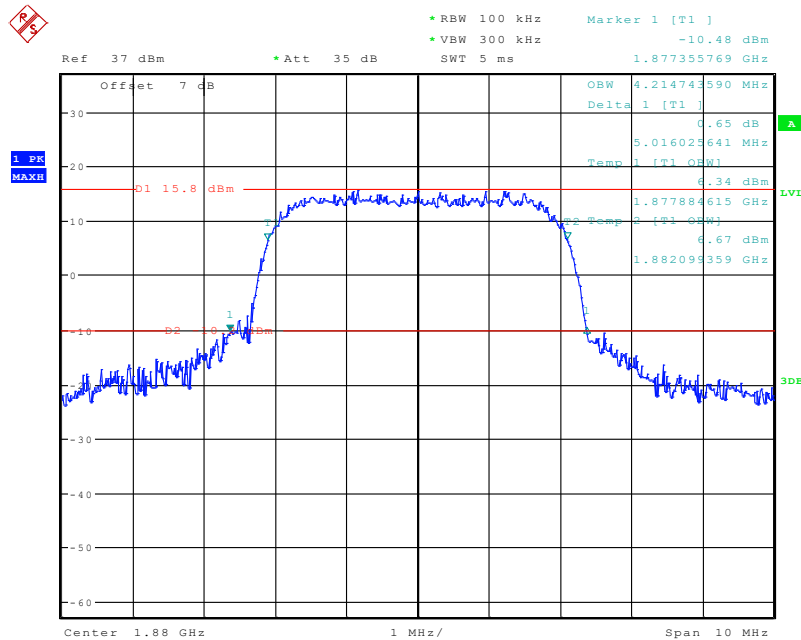
Date: 3.MAR.2022 09:54:13

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



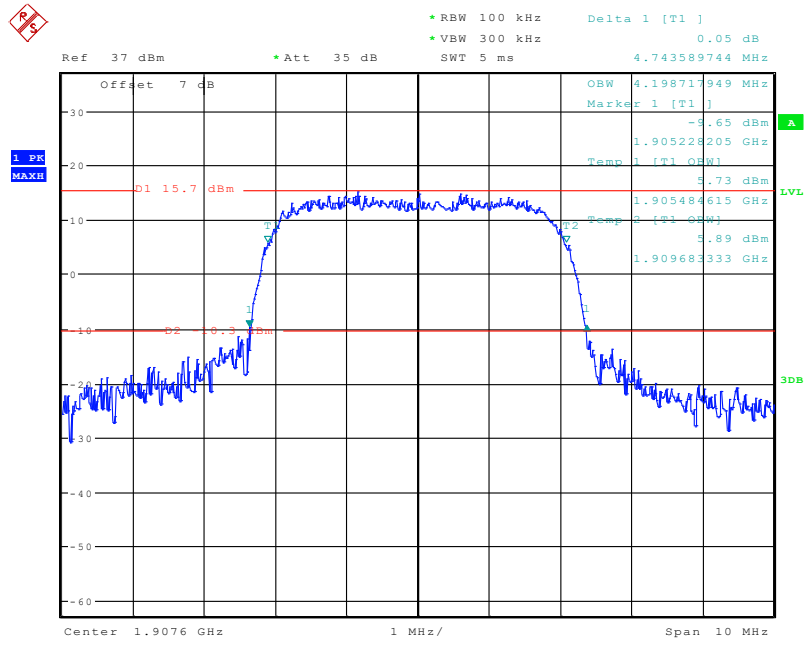
Date: 3.MAR.2022 09:15:04

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



Date: 3.MAR.2022 09:13:49

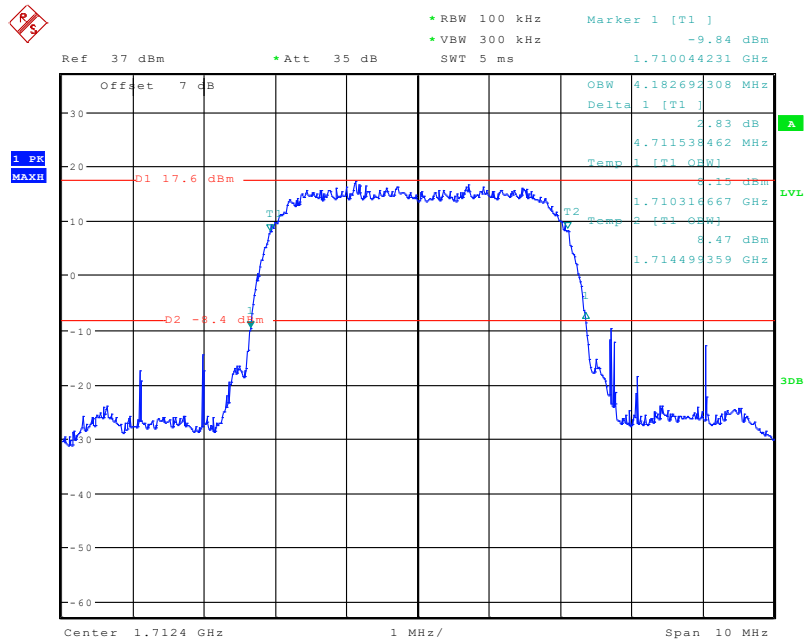
26 dB Emissions & 99% Occupied Bandwidth for HSDPA (16QAM) Mode, High channel



Date: 3.MAR.2022 09:12:23

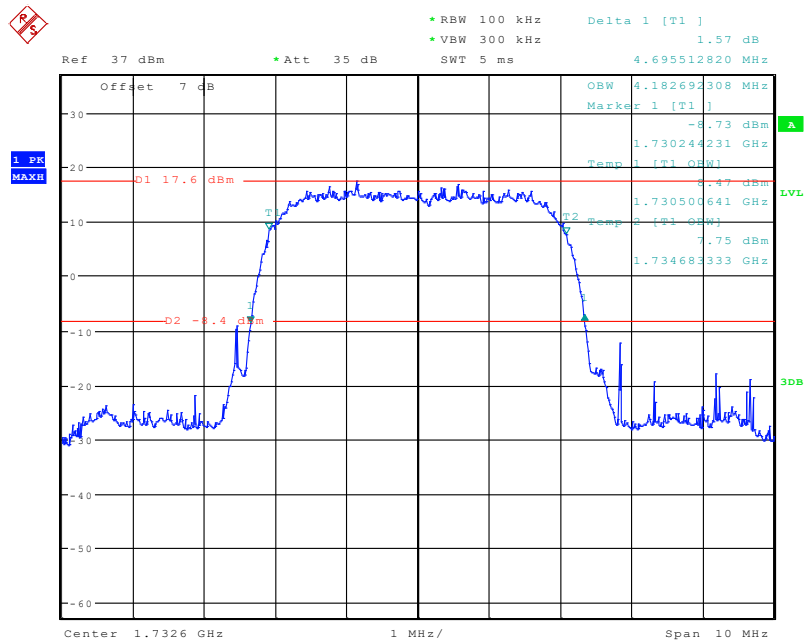
AWS Band (Part 27)

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



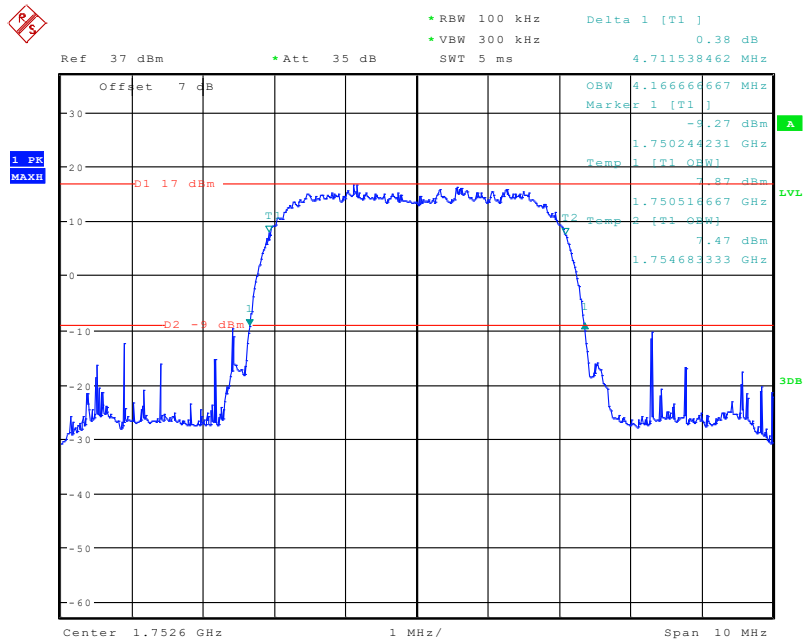
Date: 3.MAR.2022 09:05:43

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



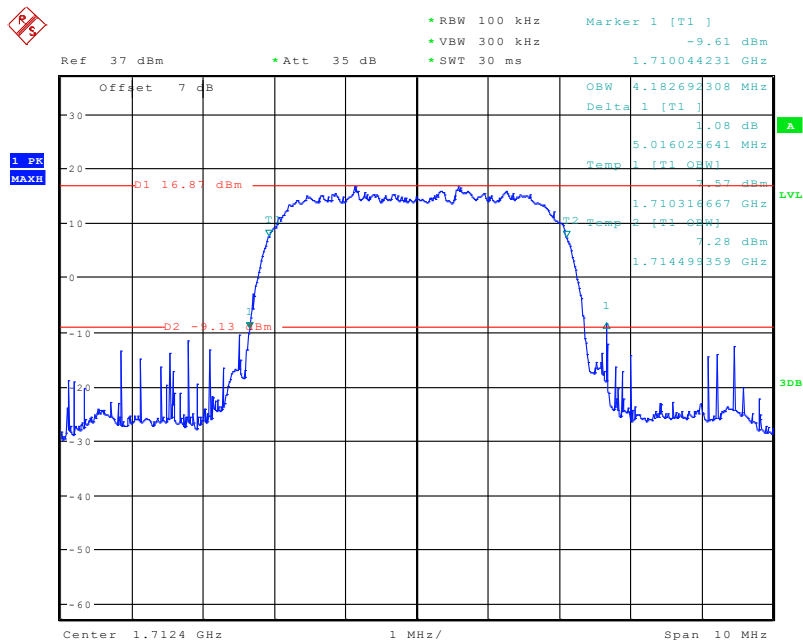
Date: 3.MAR.2022 09:06:22

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



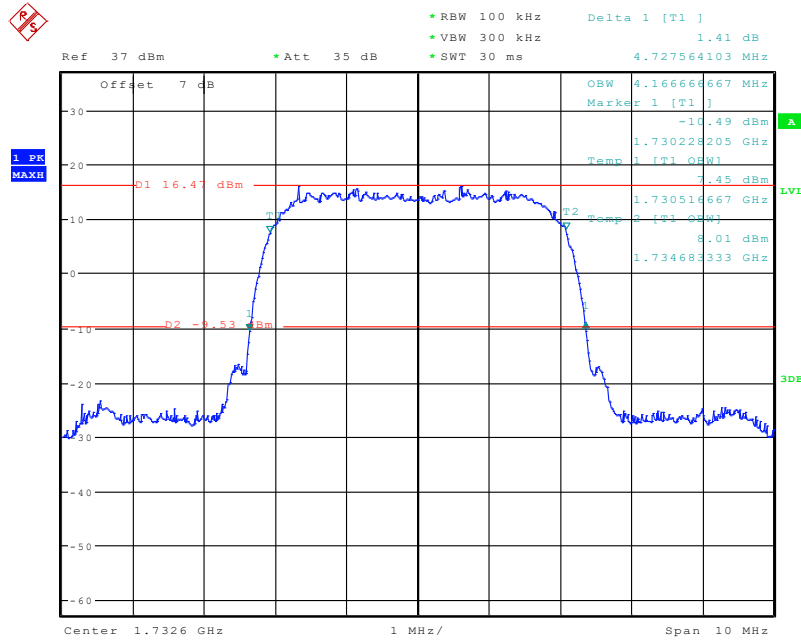
Date: 3.MAR.2022 09:07:15

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



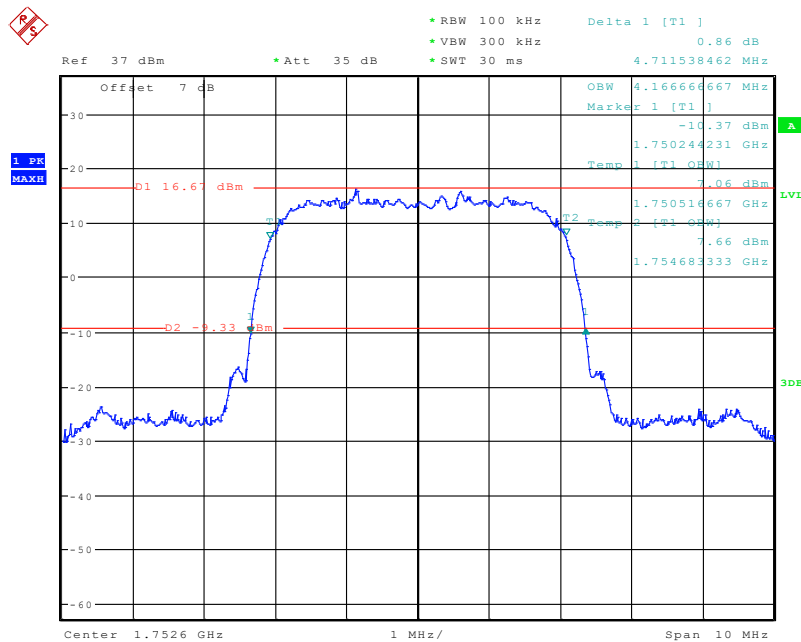
Date: 3.MAR.2022 09:55:29

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



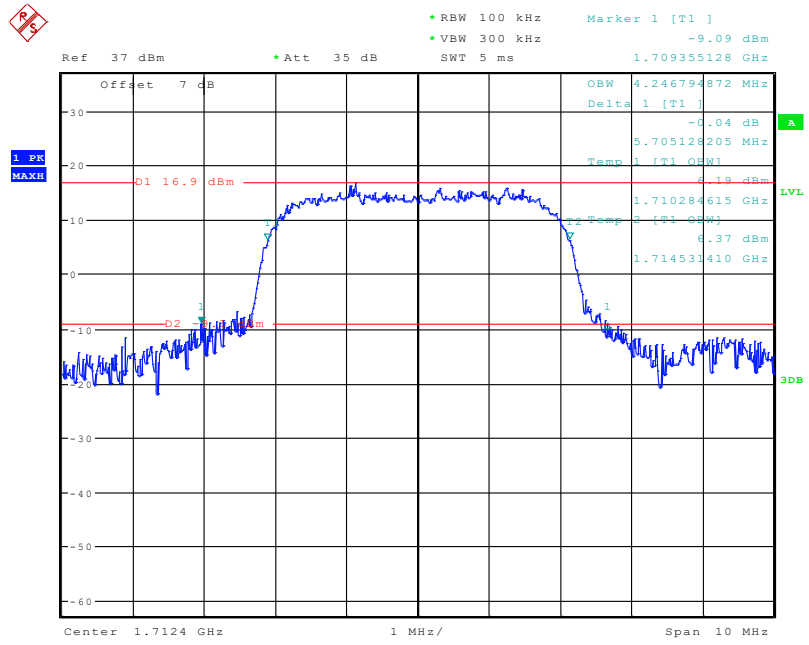
Date: 3.MAR.2022 09:56:14

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



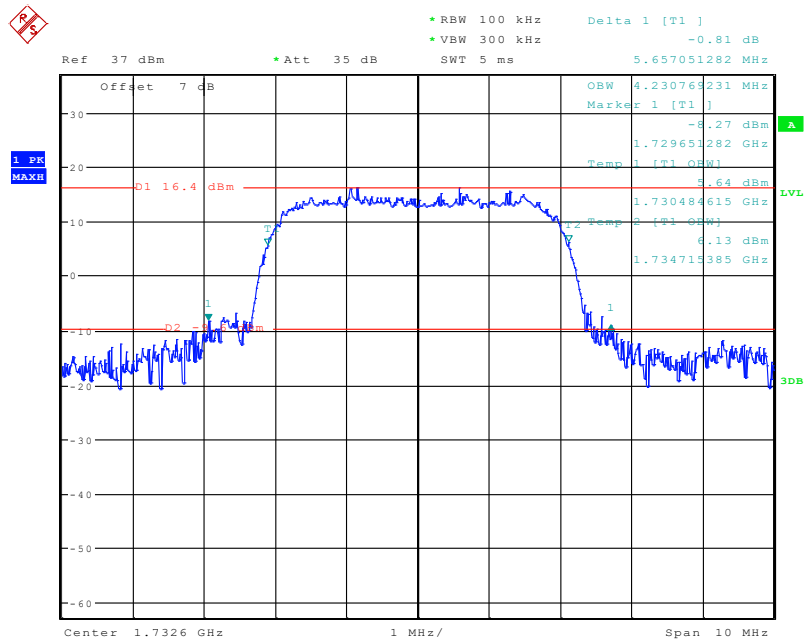
Date: 3.MAR.2022 09:57:11

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



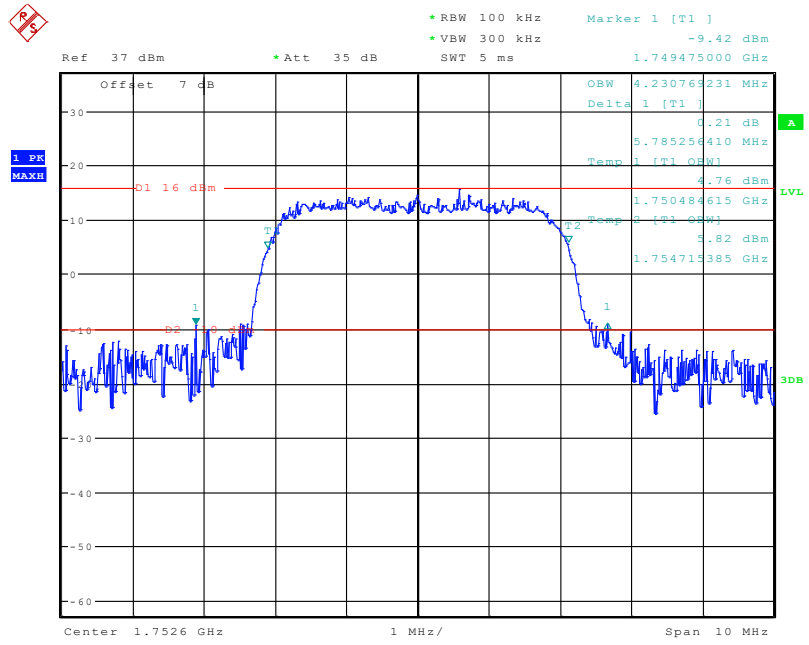
Date: 3.MAR.2022 09:17:17

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



Date: 3.MAR.2022 09:18:37

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



Date: 3.MAR.2022 09:19:21

LTE Band 2:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.101	1.303	1.104	1.314	1.098	1.302
	16QAM	1.104	1.314	1.092	1.296	1.098	1.290
3 MHz	QPSK	2.688	2.880	2.692	2.894	2.688	2.892
	16QAM	2.688	2.892	2.688	2.880	2.688	2.880
5 MHz	QPSK	4.540	5.200	4.520	5.200	4.520	5.120
	16QAM	4.520	5.160	4.560	5.220	4.540	5.200
10 MHz	QPSK	9.000	9.960	8.960	9.920	8.960	9.800
	16QAM	8.960	9.800	8.960	9.880	8.960	9.800
15 MHz	QPSK	13.620	15.240	13.500	15.180	13.560	15.300
	16QAM	13.620	15.180	13.500	15.180	13.560	15.240
20 MHz	QPSK	18.000	19.760	18.000	19.840	18.000	19.680
	16QAM	18.000	19.760	18.000	19.680	18.000	19.520

LTE Band 4:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.098	1.296	1.104	1.326	1.110	1.290
	16QAM	1.104	1.320	1.098	1.290	1.104	1.290
3 MHz	QPSK	2.688	2.880	2.676	2.856	2.688	2.892
	16QAM	2.676	2.892	2.688	2.880	2.688	2.880
5 MHz	QPSK	4.540	5.180	4.520	5.200	4.520	5.160
	16QAM	4.520	5.100	4.560	5.220	4.540	5.240
10 MHz	QPSK	8.960	9.840	8.960	9.840	8.960	9.720
	16QAM	8.960	9.760	8.960	9.840	8.960	9.880
15 MHz	QPSK	13.560	15.300	13.500	15.180	13.620	15.180
	16QAM	13.560	15.060	13.560	15.180	13.560	15.180
20 MHz	QPSK	18.000	19.600	18.000	19.760	18.000	19.920
	16QAM	18.000	19.680	18.080	19.680	18.000	19.680

LTE Band 5:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.104	1.326	1.104	1.320	1.110	1.302
	16QAM	1.104	1.326	1.104	1.296	1.104	1.296
3 MHz	QPSK	2.688	2.880	2.700	2.880	2.688	2.892
	16QAM	2.688	2.904	2.688	2.880	2.688	2.880
5 MHz	QPSK	4.520	5.120	4.520	5.140	4.520	5.140
	16QAM	4.520	5.180	4.540	5.200	4.560	5.220
10 MHz	QPSK	8.960	9.960	8.960	9.880	9.000	9.880
	16QAM	8.960	9.840	9.000	9.880	9.000	9.880

LTE Band 7:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
5 MHz	QPSK	4.540	5.200	4.520	5.220	4.520	5.140
	16QAM	4.520	5.140	4.560	5.180	4.540	5.260
10 MHz	QPSK	8.960	10.000	8.960	9.760	8.960	9.960
	16QAM	8.960	9.680	8.960	9.840	8.960	9.880
15 MHz	QPSK	13.560	15.300	13.500	15.120	13.620	15.360
	16QAM	13.620	15.180	13.560	15.180	13.620	15.240
20 MHz	QPSK	18.000	19.600	18.000	19.600	18.000	20.000
	16QAM	18.080	19.680	18.000	19.840	18.000	19.680

LTE Band 12:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.098	1.296	1.104	1.320	1.104	1.302
	16QAM	1.104	1.308	1.098	1.290	1.098	1.314
3 MHz	QPSK	2.688	2.856	2.688	2.880	2.688	2.892
	16QAM	2.688	2.868	2.688	2.880	2.688	2.880
5 MHz	QPSK	4.560	5.180	4.520	5.200	4.520	5.180
	16QAM	4.520	5.140	4.540	5.200	4.560	5.200
10 MHz	QPSK	9.000	9.800	8.960	9.880	8.960	9.840
	16QAM	8.960	9.880	8.960	9.800	9.000	9.840

LTE Band 17:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
5 MHz	QPSK	4.520	5.160	4.540	5.200	4.540	5.180
	16QAM	4.540	5.140	4.540	5.220	4.540	5.260
10 MHz	QPSK	8.960	9.880	8.960	9.720	8.960	9.800
	16QAM	8.960	9.680	8.960	9.760	9.000	9.920

LTE Band 38

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
5 MHz	QPSK	4.540	5.560	4.520	5.240	4.520	5.220
	16QAM	4.520	5.180	4.520	5.360	4.520	5.320
10 MHz	QPSK	8.960	9.920	9.000	9.960	8.960	9.880
	16QAM	8.960	9.840	8.960	9.680	8.960	10.560
15 MHz	QPSK	13.620	15.660	13.500	15.660	13.560	16.020
	16QAM	13.620	15.960	13.620	16.320	13.620	15.960
20 MHz	QPSK	18.000	20.080	18.000	19.760	18.013	20.385
	16QAM	18.000	19.760	18.000	20.560	18.000	19.840

LTE Band 41

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
5 MHz	QPSK	4.540	5.180	4.520	5.200	4.540	5.120
	16QAM	4.540	5.140	4.540	5.240	4.520	5.240
10 MHz	QPSK	9.000	9.920	9.000	9.920	8.960	9.800
	16QAM	9.000	9.840	8.960	9.720	8.960	10.080
15 MHz	QPSK	13.560	15.360	13.500	15.540	13.500	15.720
	16QAM	13.620	17.520	13.606	15.769	13.620	17.160
20 MHz	QPSK	18.000	19.520	18.000	19.680	18.000	19.920
	16QAM	18.000	19.680	18.000	21.520	18.000	19.600

LTE Band 66

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.098	1.308	1.104	1.332	1.110	1.296
	16QAM	1.110	1.314	1.098	1.296	1.098	1.296
3 MHz	QPSK	2.688	2.856	2.688	2.880	2.688	2.892
	16QAM	2.688	2.880	2.688	2.904	2.688	2.892
5 MHz	QPSK	4.540	5.200	4.520	5.160	4.520	5.160
	16QAM	4.520	5.140	4.540	5.180	4.560	5.220
10 MHz	QPSK	8.960	9.960	8.960	9.880	8.960	9.920
	16QAM	8.960	9.720	8.960	9.840	8.960	9.920
15 MHz	QPSK	13.620	15.180	13.500	15.180	13.560	15.060
	16QAM	13.560	15.060	13.620	15.120	13.500	15.180
20 MHz	QPSK	18.000	19.680	18.000	19.680	18.000	19.920
	16QAM	17.920	19.680	18.000	19.840	18.000	19.520

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

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

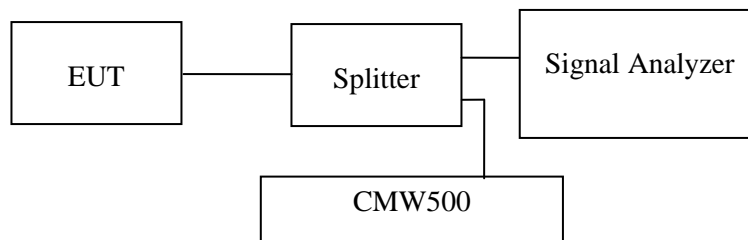
Applicable Standard

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

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

Test Procedure

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



Test Data

Environmental Conditions

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

The testing was performed by Gala Liu from 2022-03-02 to 2022-03-03.

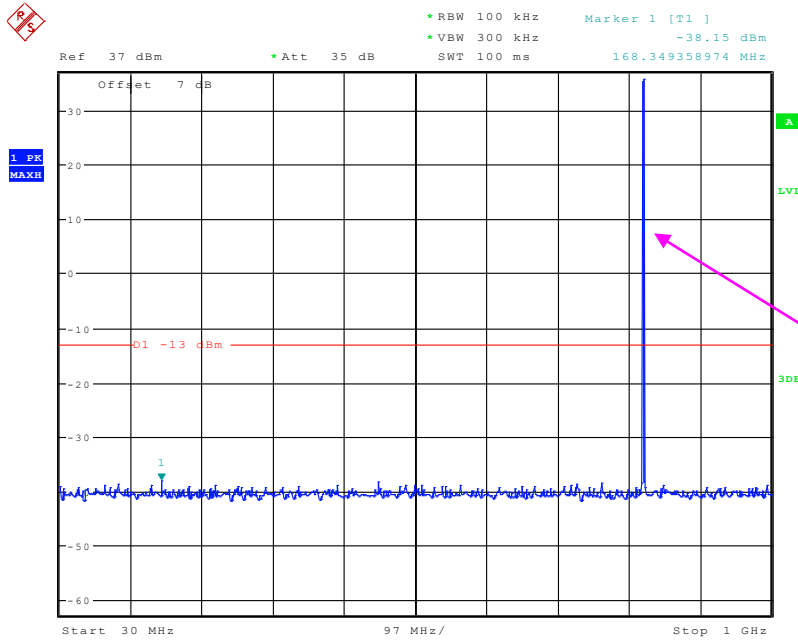
EUT operation mode: Transmitting

Test result: Pass

Please refer to the following plots.

Cellular Band (Part 22H) Low Channel:

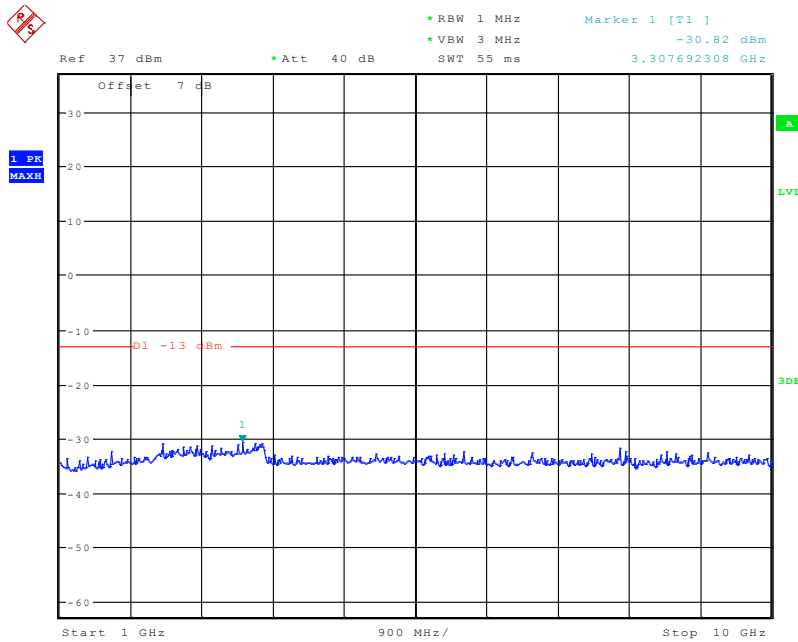
30 MHz – 1 GHz (GSM Mode)



Fundamental test

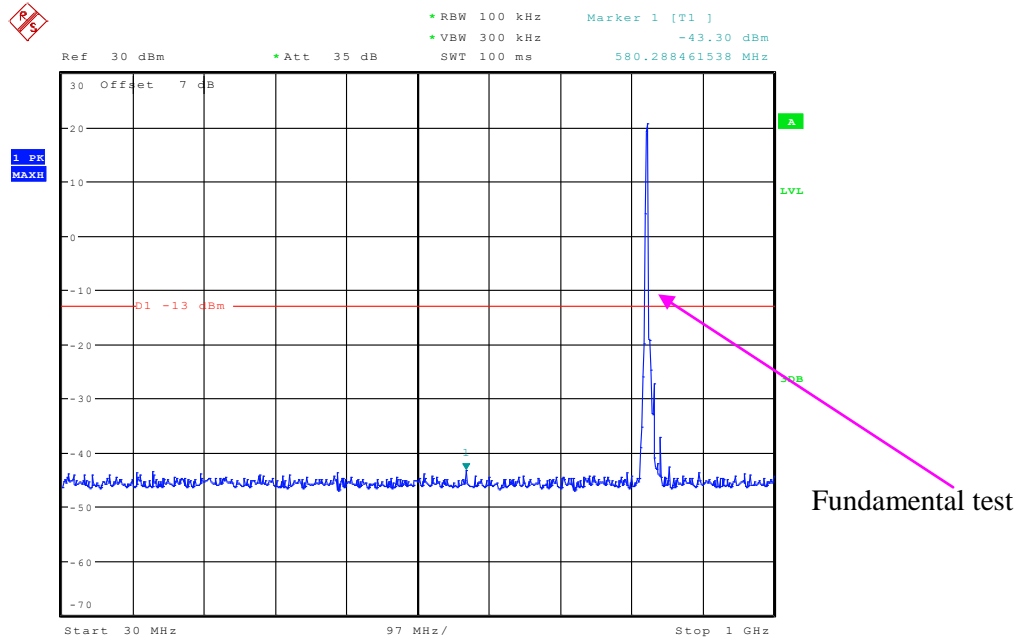
Date: 3.MAR.2022 11:24:45

1 GHz – 10 GHz (GSM Mode)



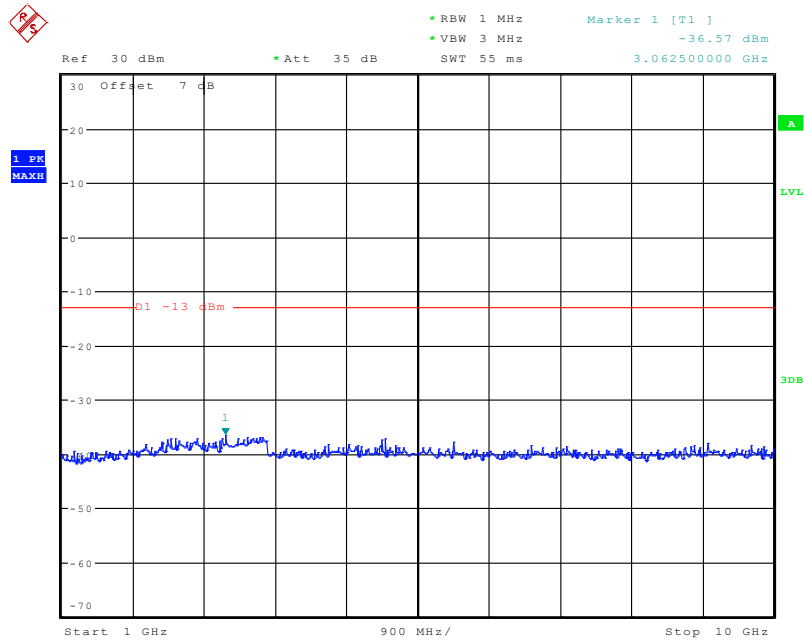
Date: 3.MAR.2022 11:19:32

30 MHz – 1 GHz (WCDMA Mode)



Date: 3.MAR.2022 10:00:49

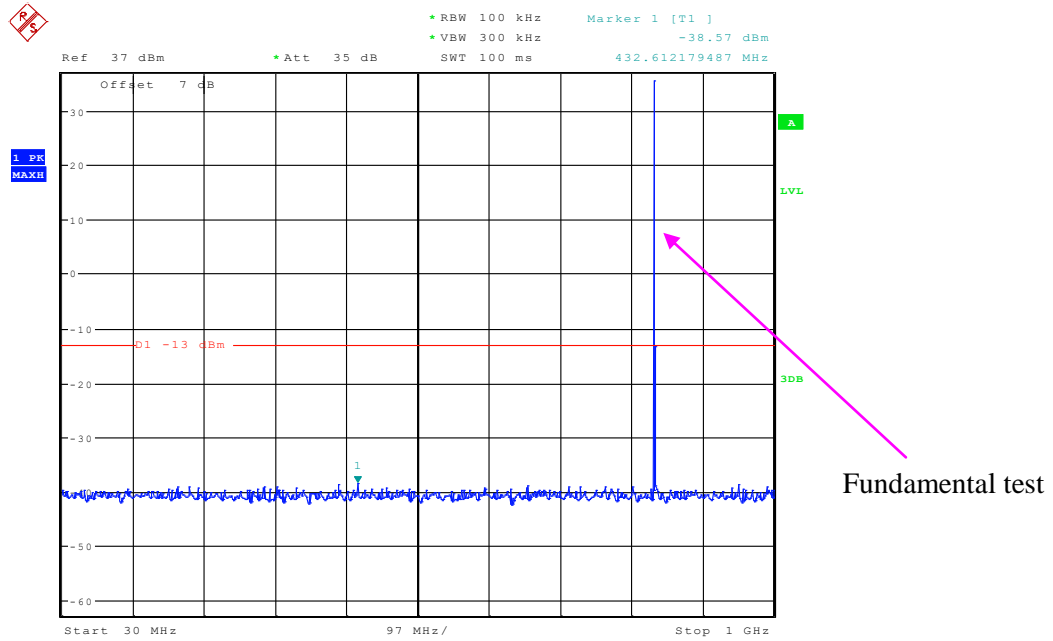
1 GHz –10 GHz (WCDMA Mode)



Date: 3.MAR.2022 10:03:04

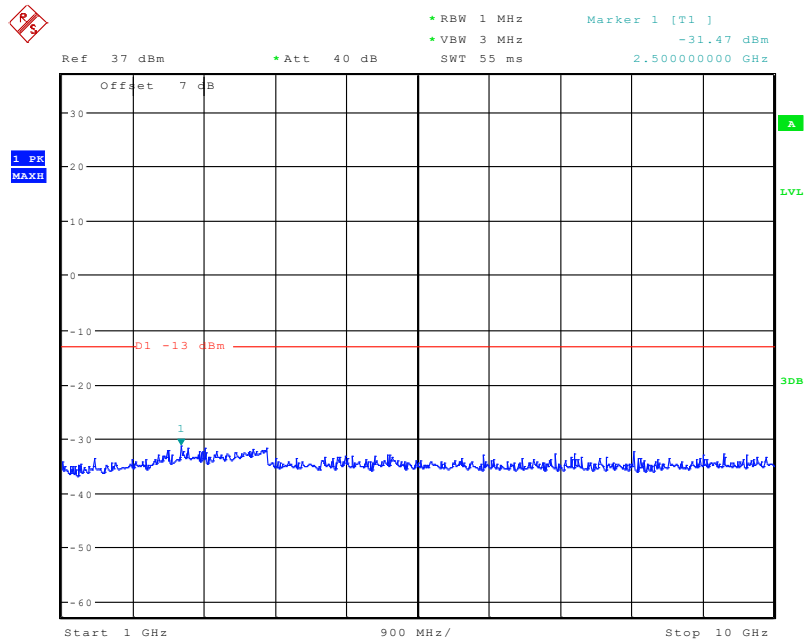
Middle Channel:

30 MHz – 1 (GHz GSM Mode)



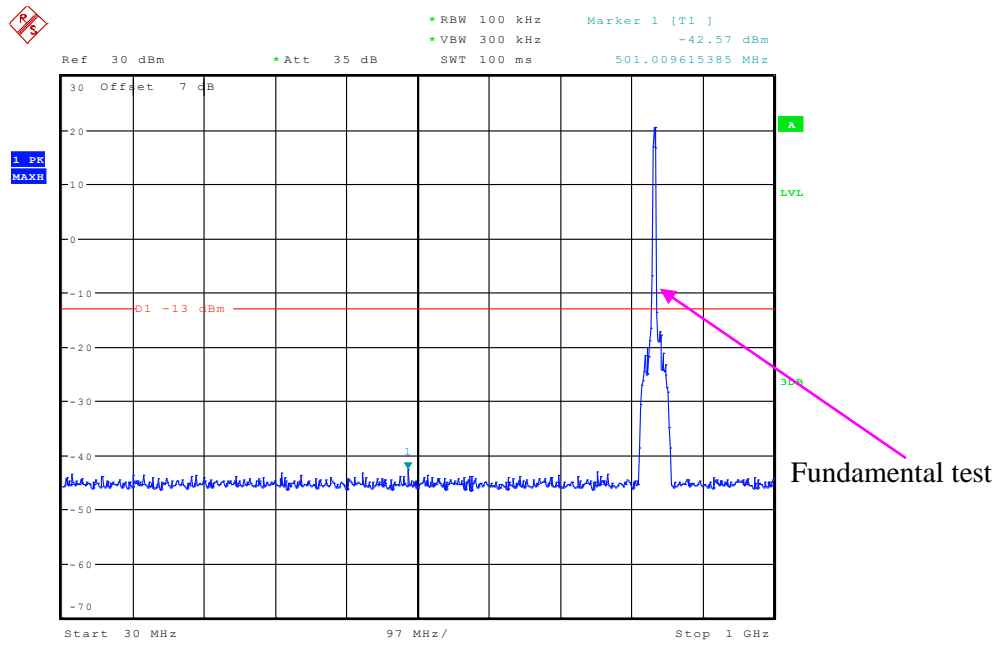
Date: 3.MAR.2022 11:25:20

1 GHz – 10 GHz (GSM Mode)



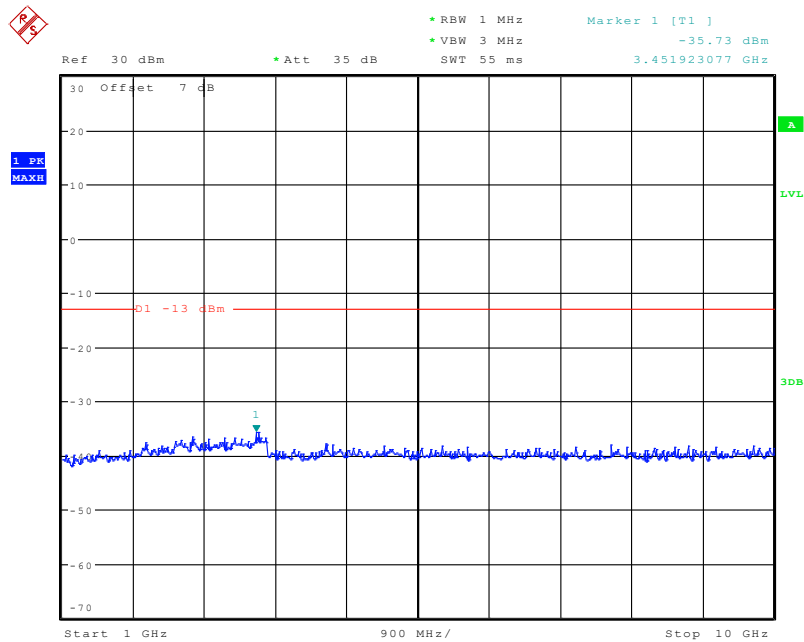
Date: 3.MAR.2022 11:20:01

30 MHz – 1 GHz (WCDMA Mode)



Date: 3.MAR.2022 10:01:23

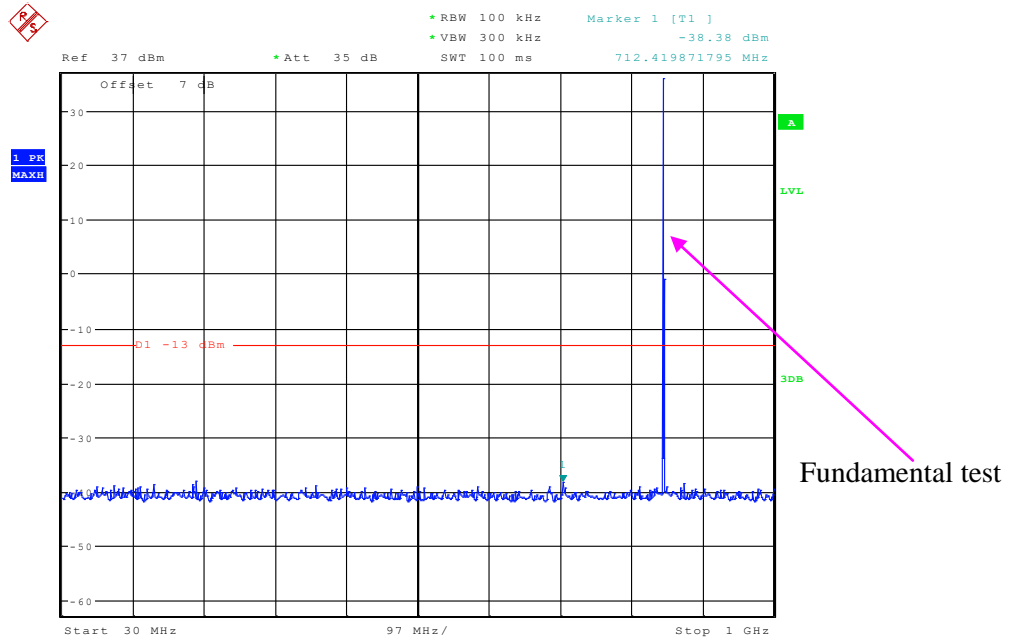
1 GHz – 10 GHz (WCDMA Mode)



Date: 3.MAR.2022 10:02:49

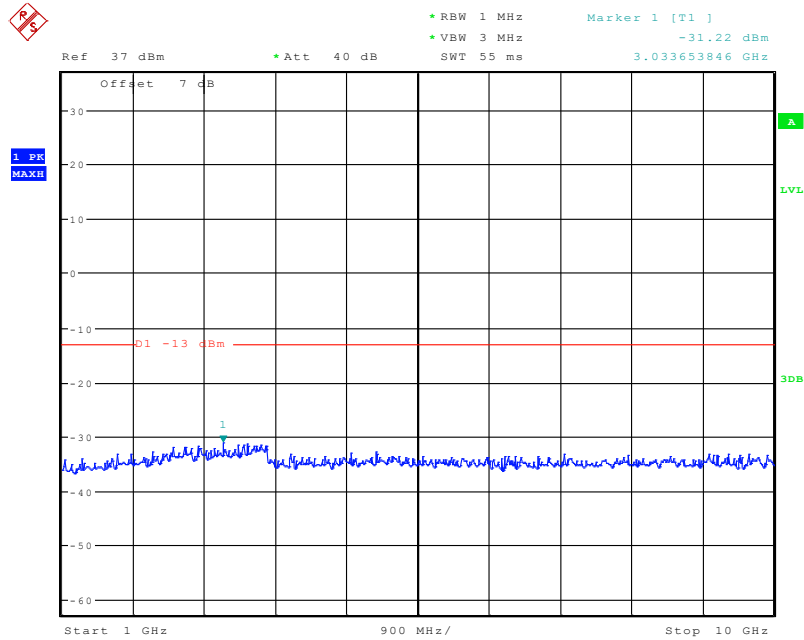
High Channel:

30 MHz – 1 GHz (GSM Mode)



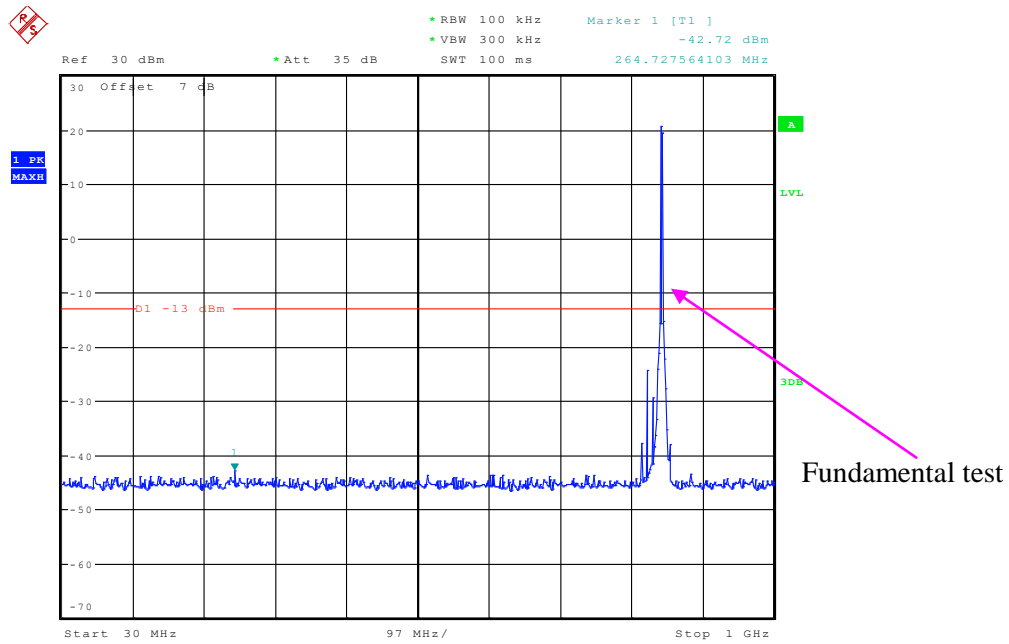
Date: 3.MAR.2022 11:25:45

1 GHz – 10 GHz (GSM Mode)



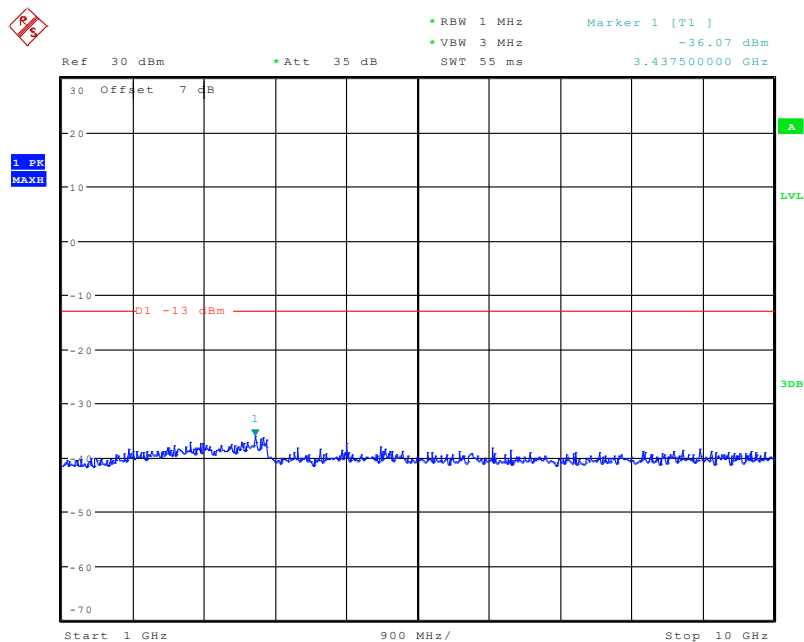
Date: 3.MAR.2022 11:20:12

30 MHz – 1 GHz (WCDMA Mode)



Date: 3.MAR.2022 10:01:50

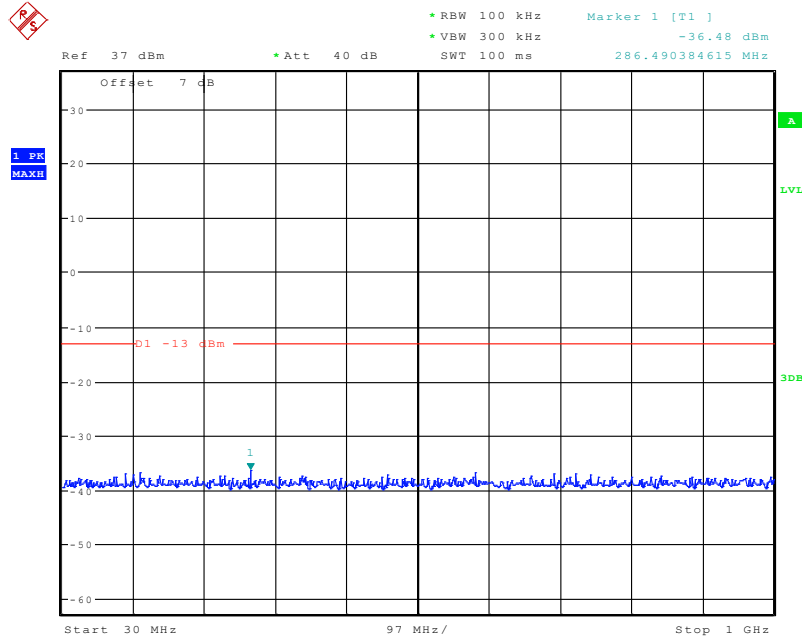
1 GHz – 10 GHz (WCDMA Mode)



Date: 3.MAR.2022 10:02:16

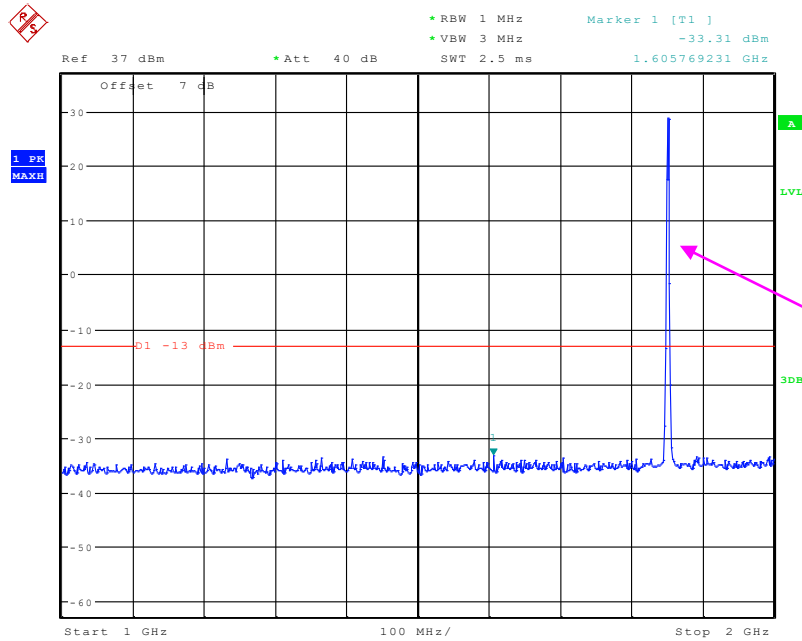
**PCS Band (Part 24E)
Low Channel:**

30 MHz – 1 GHz (GSM Mode)



Date: 3.MAR.2022 11:15:39

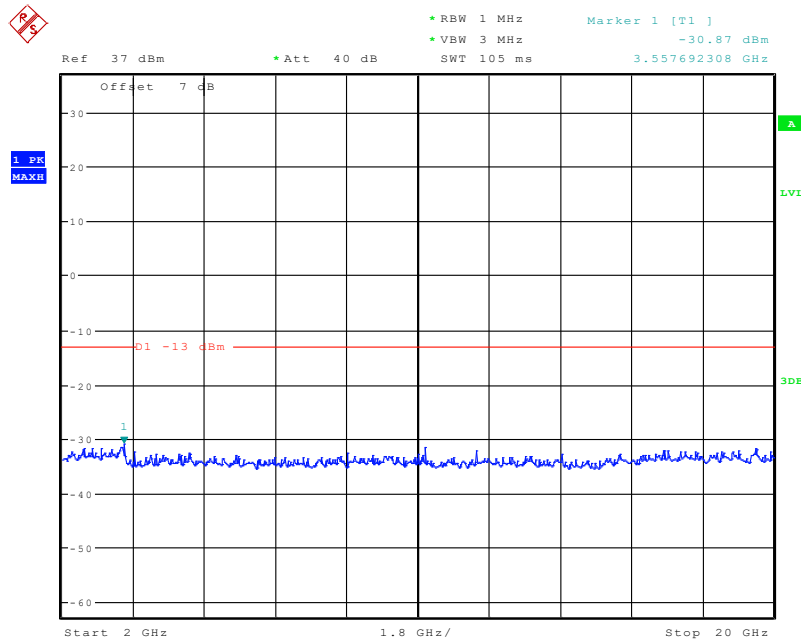
1 GHz – 2 GHz (GSM Mode)



Fundamental test

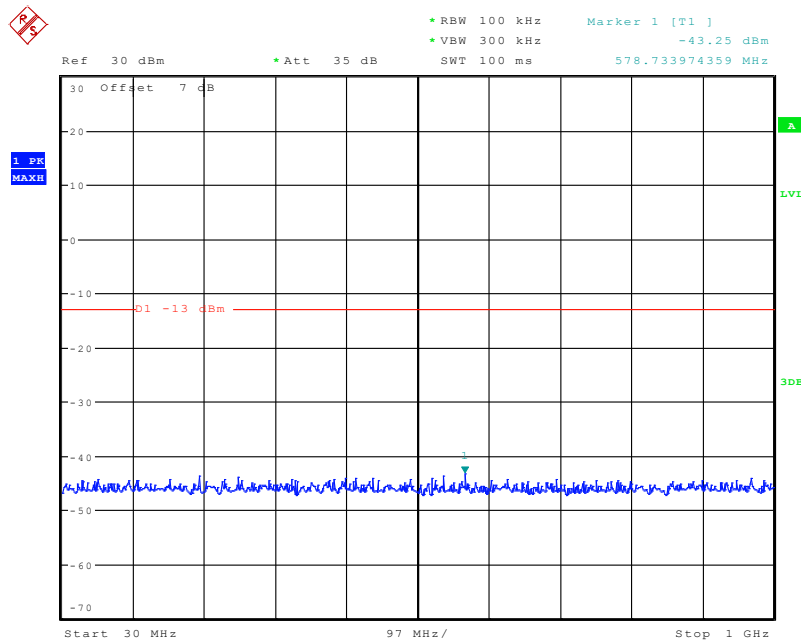
Date: 3.MAR.2022 11:17:16

2 GHz – 20 GHz (GSM Mode)



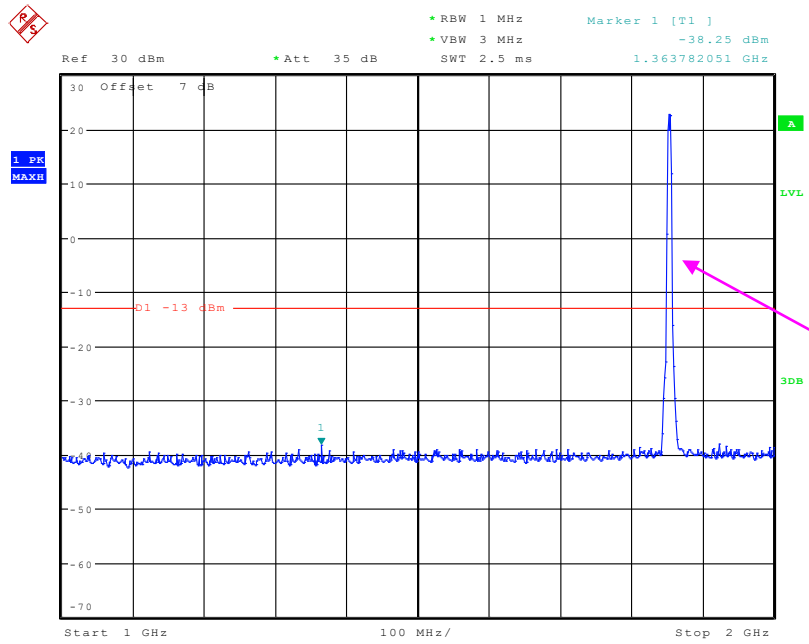
Date: 3.MAR.2022 11:18:08

30 MHz – 1 GHz (WCDMA Mode)



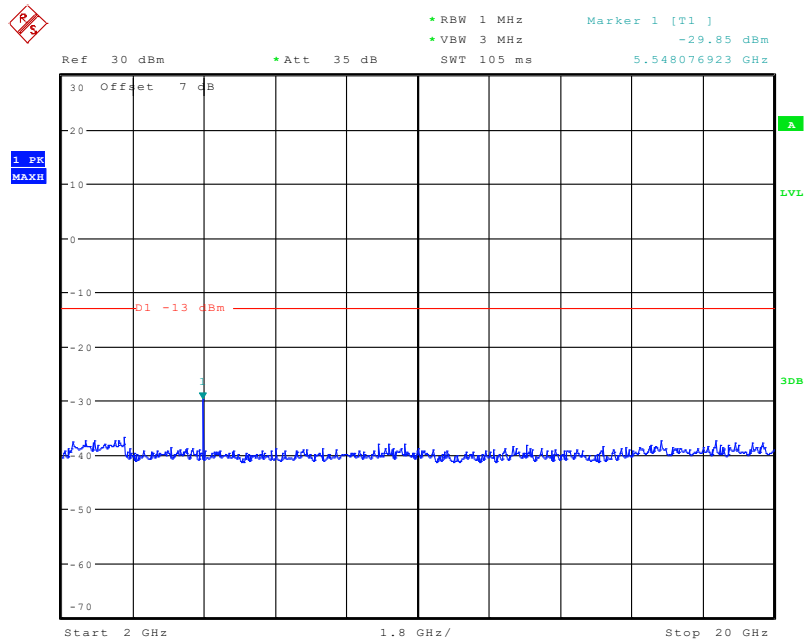
Date: 3.MAR.2022 09:58:45

1 GHz – 2 GHz (WCDMA Mode)



Date: 3.MAR.2022 10:03:49

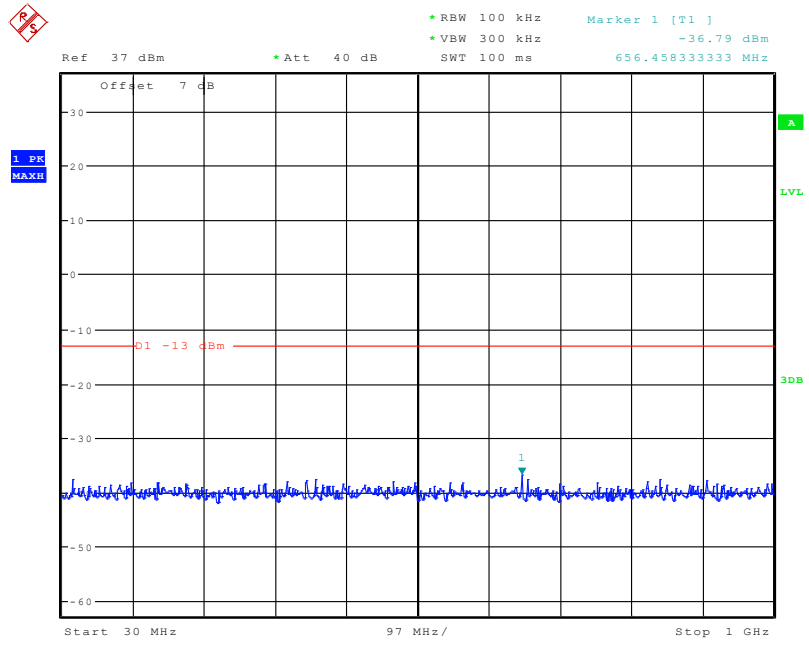
2 GHz – 20 GHz (WCDMA Mode)



Date: 3.MAR.2022 10:07:38

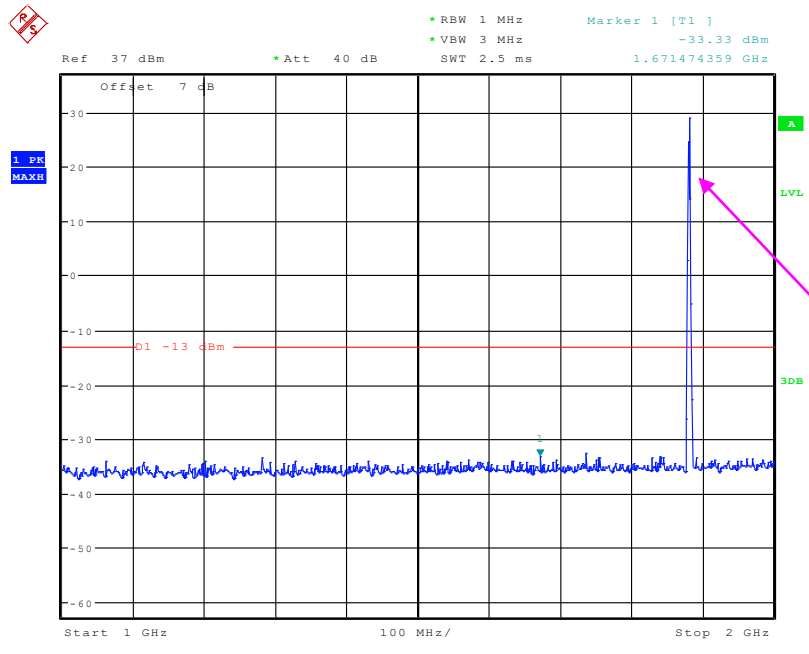
Middle Channel:

30 MHz – 1 GHz (GSM Mode)



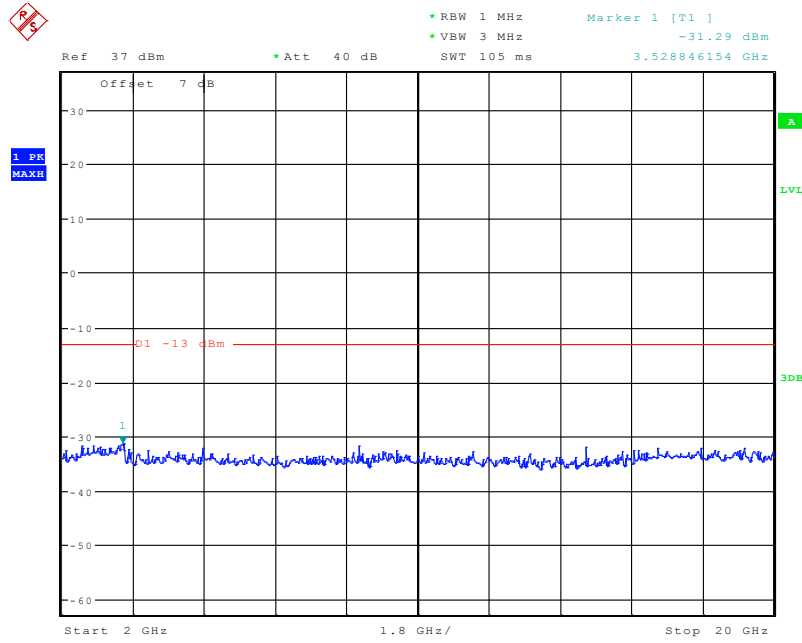
Date: 3.MAR.2022 11:15:50

1 GHz – 2 GHz (GSM Mode)



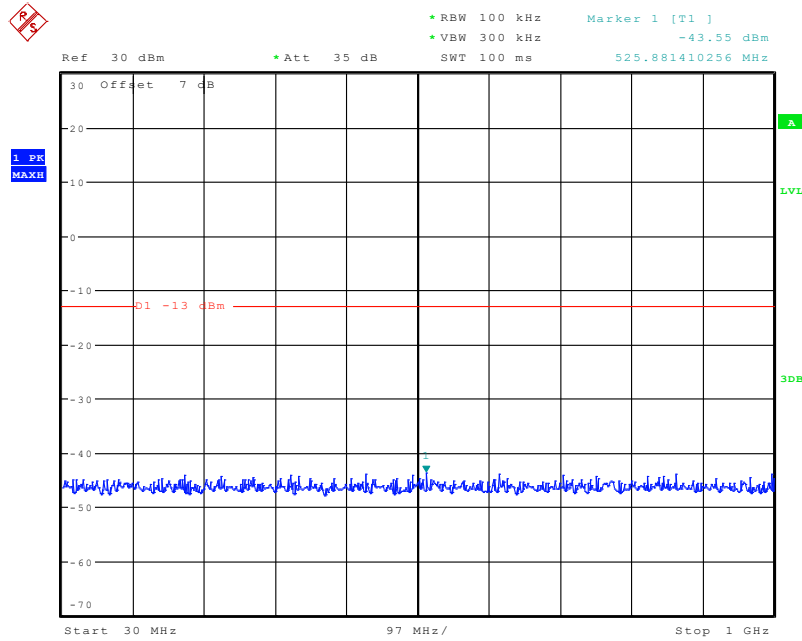
Date: 3.MAR.2022 11:16:51

2 GHz – 20 GHz (GSM Mode)



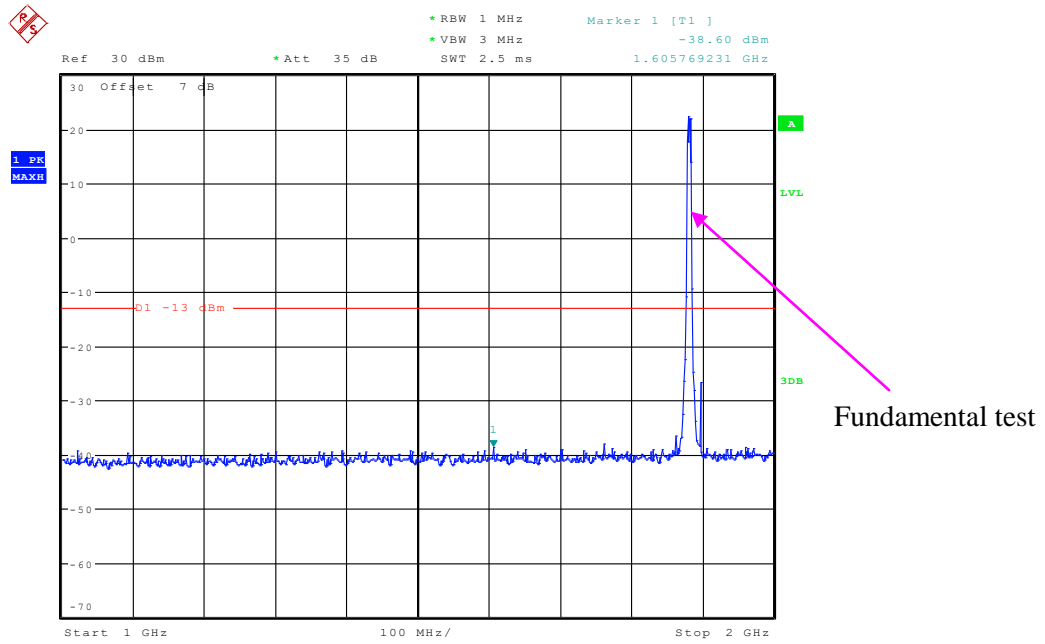
Date: 3.MAR.2022 11:17:37

30 MHz – 1 GHz (WCDMA Mode)



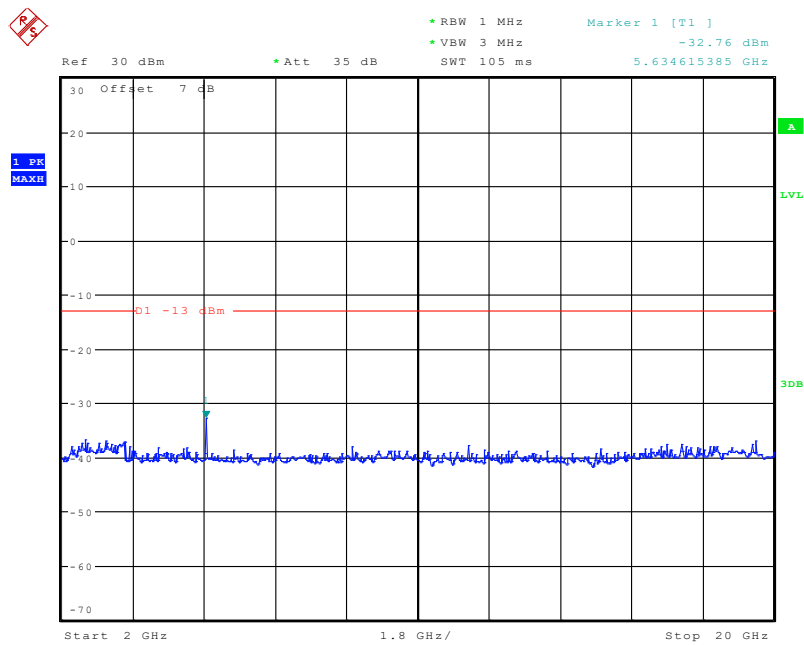
Date: 3.MAR.2022 09:59:05

1 GHz – 2GHz (WCDMA Mode)



Date: 3.MAR.2022 10:04:20

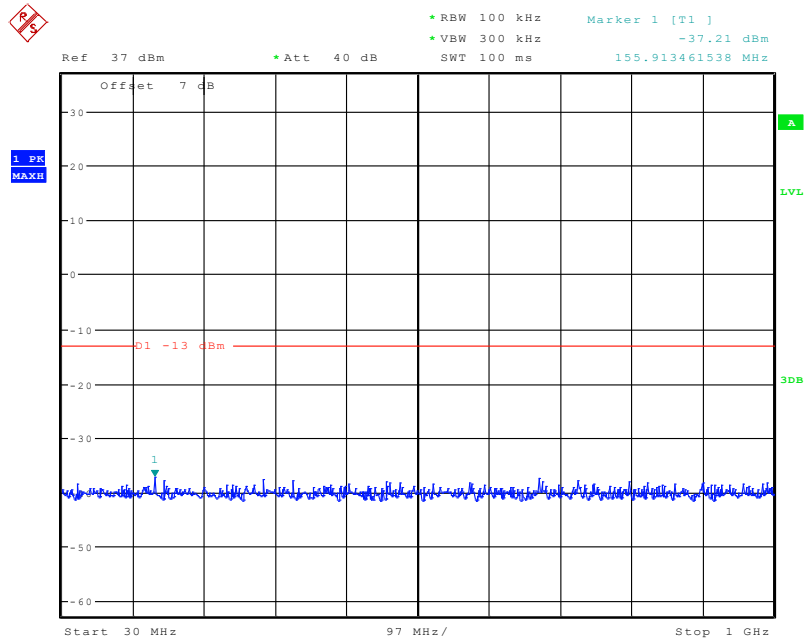
2 GHz – 20GHz (WCDMA Mode)



Date: 3.MAR.2022 10:07:56

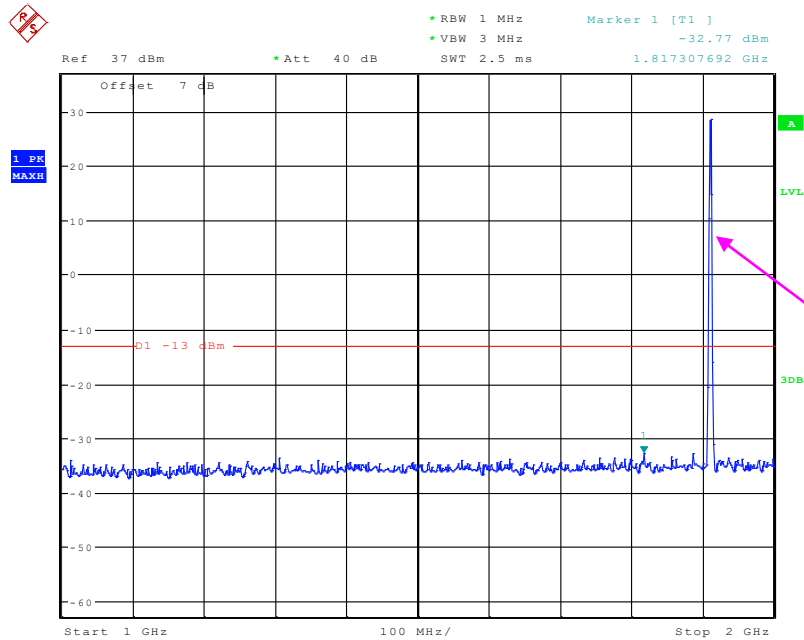
High Channel:

30 MHz – 1 GHz (GSM Mode)



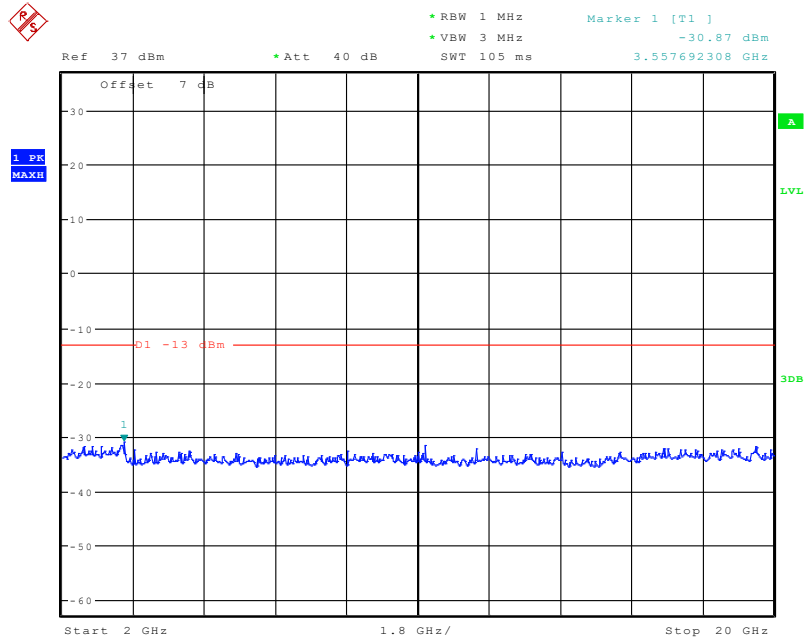
Date: 3.MAR.2022 11:16:00

1 GHz – 2 GHz (GSM Mode)



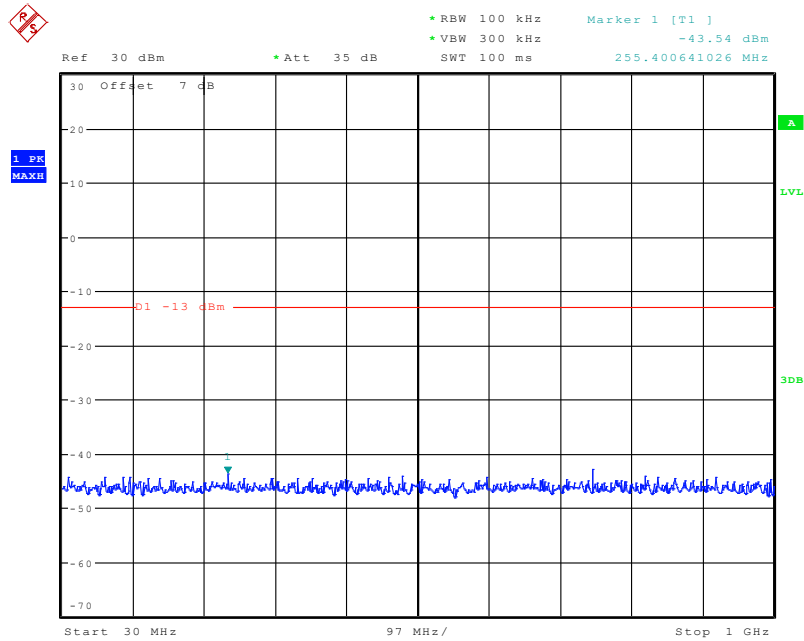
Date: 3.MAR.2022 11:16:21

2 GHz– 20 GHz (GSM Mode)



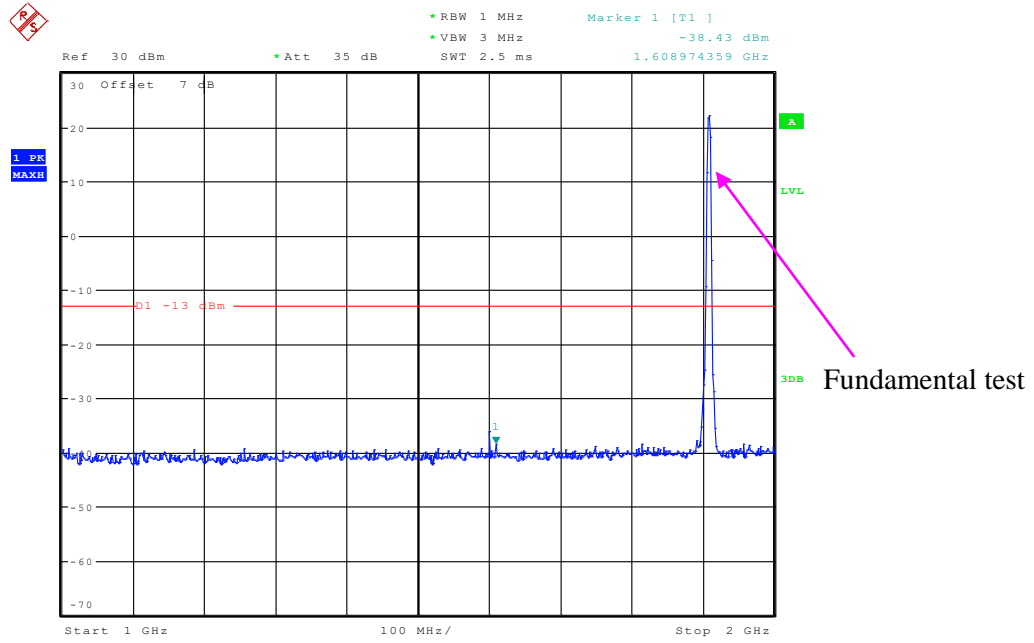
Date: 3.MAR.2022 11:18:08

30 MHz – 1 GHz (WCDMA Mode)



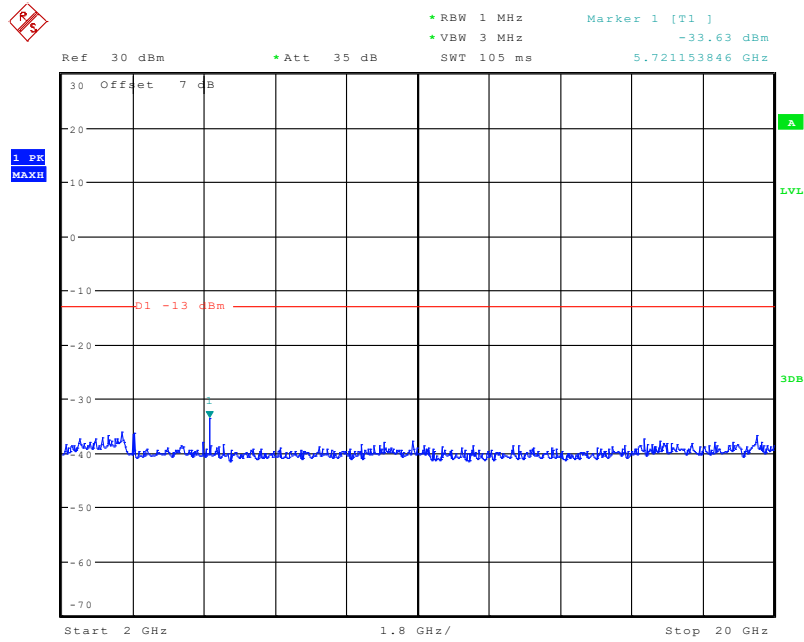
Date: 3.MAR.2022 09:59:16

1 GHz – 2 GHz (WCDMA Mode)



Date: 3.MAR.2022 10:04:48

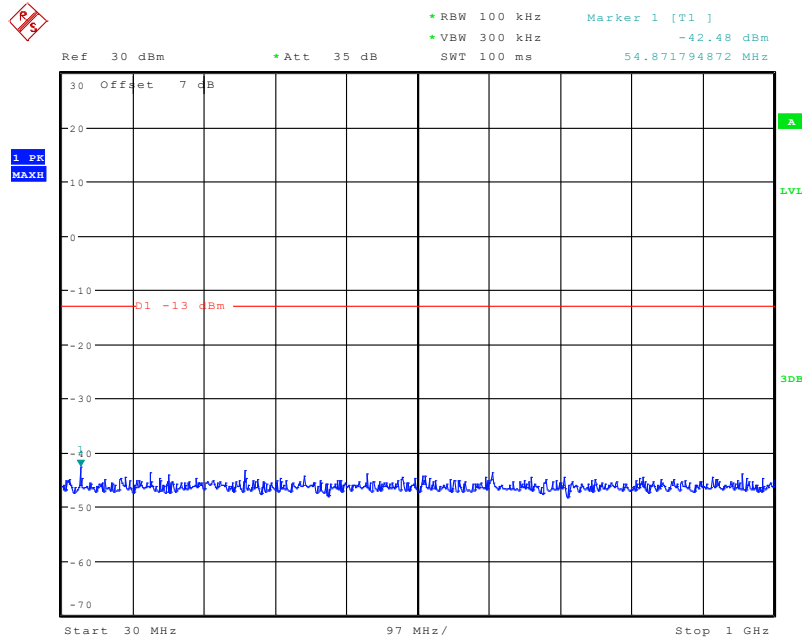
2GHz – 20 GHz (WCDMA Mode)



Date: 3.MAR.2022 10:08:11

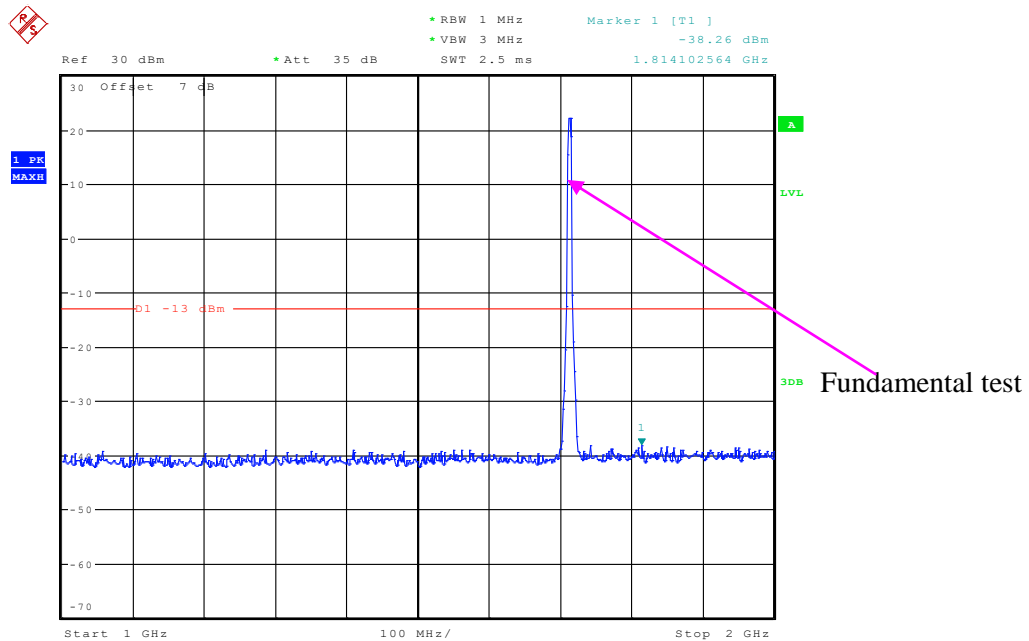
AWS Band (Part 27) Low Channel:

30 MHz – 1 GHz (WCDMA Mode)



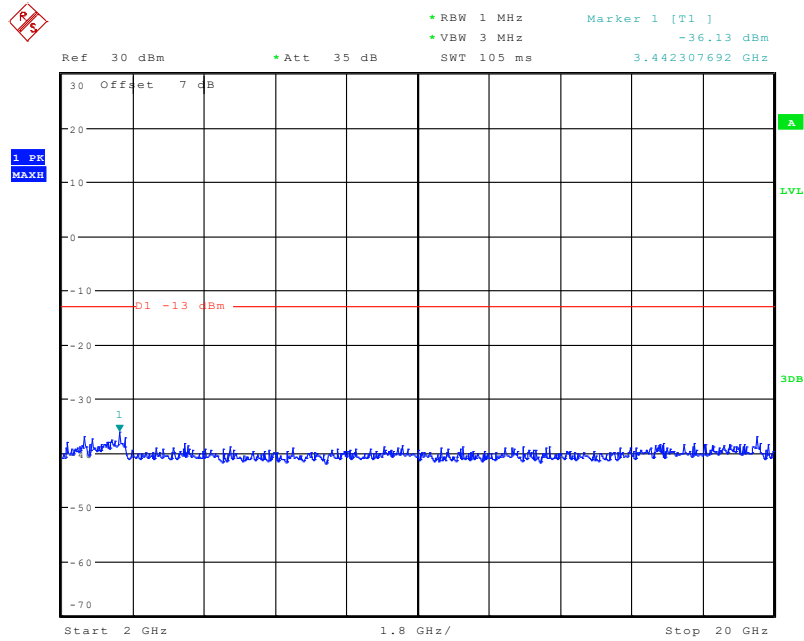
Date: 3.MAR.2022 09:59:55

1 GHz – 2 GHz (WCDMA Mode)



Date: 3.MAR.2022 10:05:13

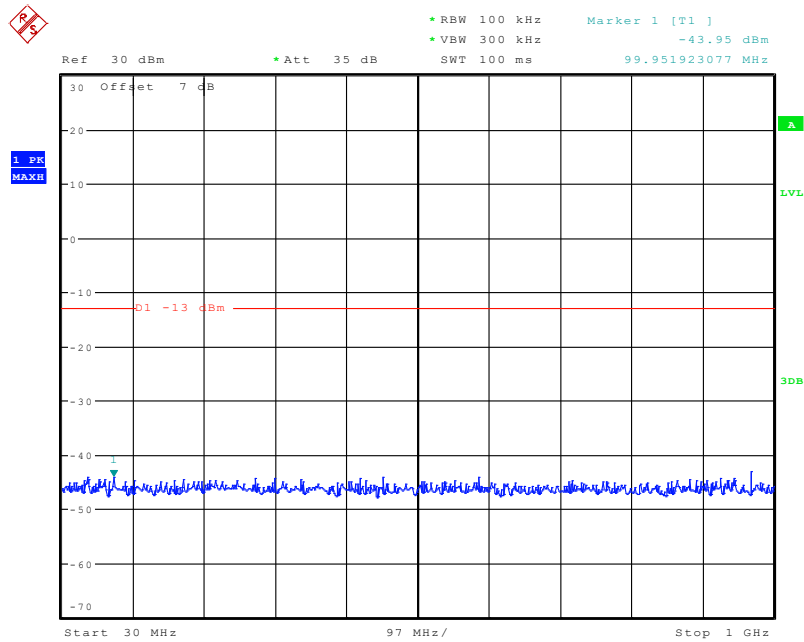
2 GHz – 20 GHz (WCDMA Mode)



Date: 3.MAR.2022 10:07:07

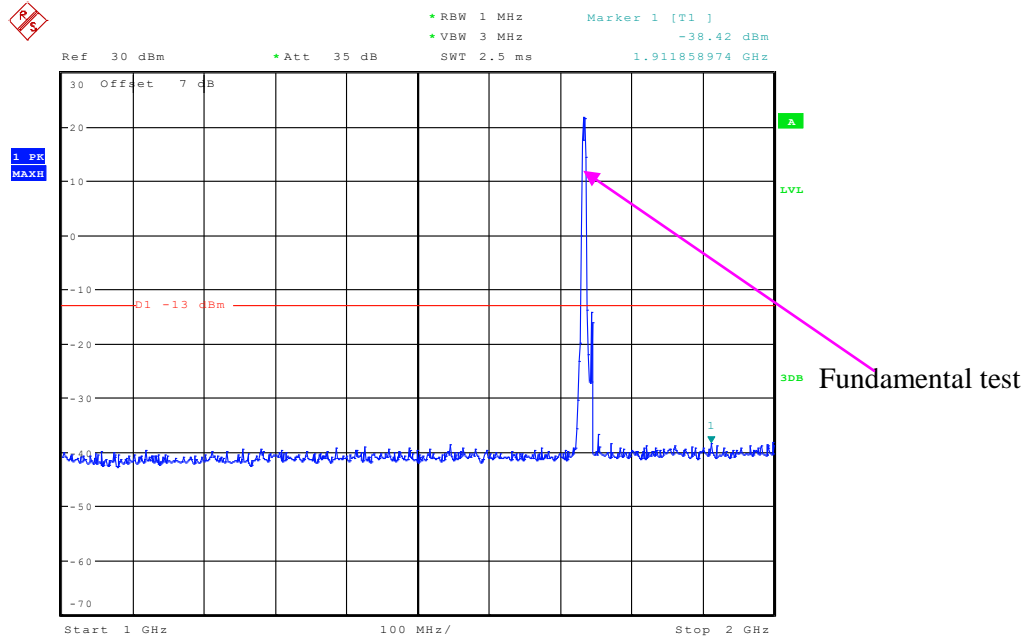
Middle Channel

30 MHz – 1 GHz (WCDMA Mode)



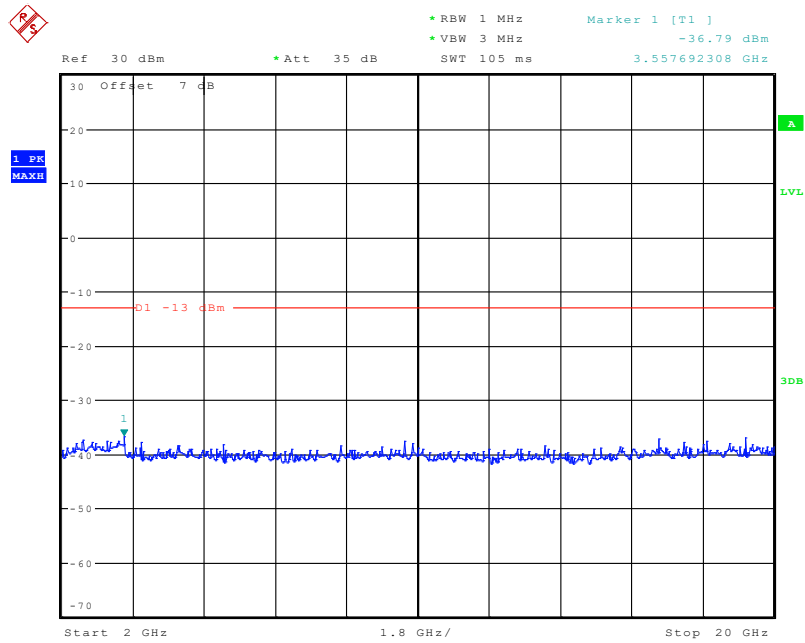
Date: 3.MAR.2022 09:59:43

1 GHz – 2 GHz (WCDMA Mode)



Date: 3.MAR.2022 10:05:58

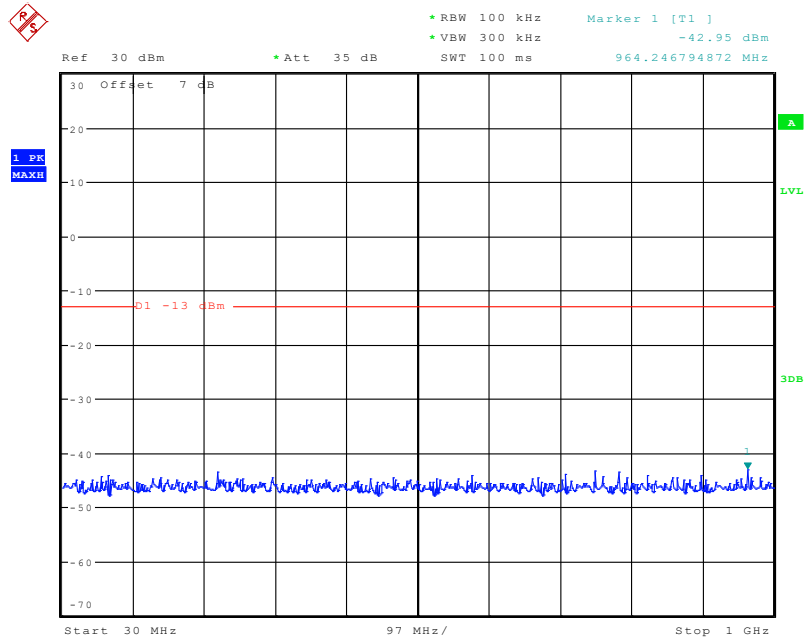
2 GHz – 20 GHz (WCDMA Mode)



Date: 3.MAR.2022 10:06:56

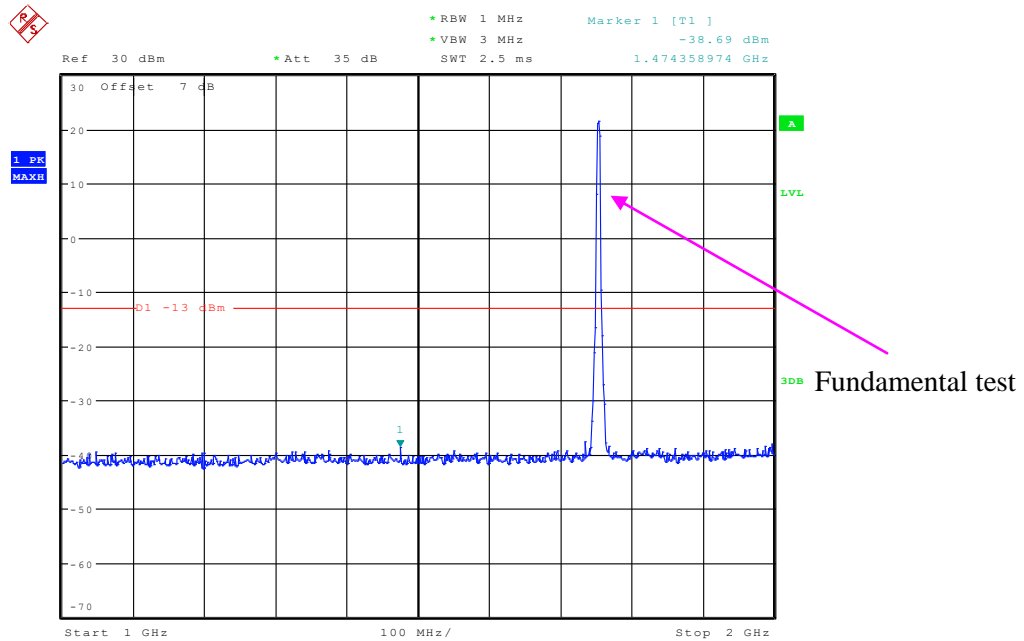
High Channel:

30 MHz – 1 GHz (WCDMA Mode)



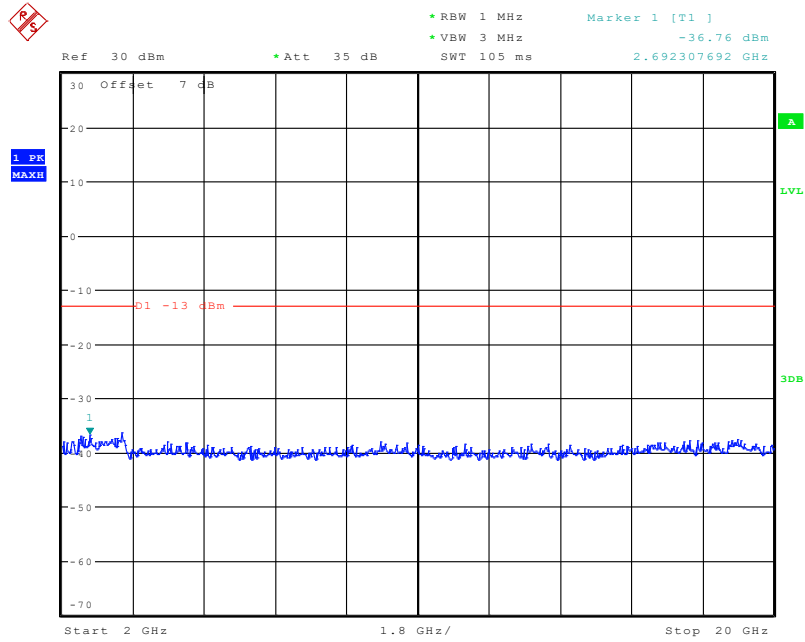
Date: 3.MAR.2022 09:59:29

1 GHz – 2 GHz (WCDMA Mode)



Date: 3.MAR.2022 10:06:25

2 GHz – 20 GHz (WCDMA Mode)



Date: 3.MAR.2022 10:06:42

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

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

Applicable Standard

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

Test Procedure

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

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

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

Test Data

Environmental Conditions

Temperature:	21~25.5℃
Relative Humidity:	50~62 %
ATM Pressure:	101~101.2kPa

The testing was performed by Caro Hu on 2022-02-29 for below 1GHz and on 2022-02-25 for above 1GHz.

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

The worst case is as below:

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

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
GSM850								
Low Channel								
100.01	-74.23	352	-1.2	H	6.6	-67.63	-13	-54.63
219.98	-68.27	230	-1.8	V	1.4	-66.87	-13	-53.87
1648.4	-52.1	97	1.8	H	3.5	-48.6	-13	-35.6
1648.4	-50.3	4	1.7	V	3.1	-47.2	-13	-34.2
2472.6	-41.8	70	1.7	H	6.6	-35.2	-13	-22.2
2472.6	-44.3	149	1.9	V	5.8	-38.5	-13	-25.5
3296.8	-46.8	28	1.7	H	6.4	-40.4	-13	-27.4
3296.8	-50.9	265	1.7	V	5.7	-45.2	-13	-32.2
Middle Channel								
100.01	-74.96	72	-1.2	H	6.6	-68.36	-13	-55.36
219.98	-66.77	293	-1.8	V	1.4	-65.37	-13	-52.37
1673.2	-49.5	120	2.0	H	3.8	-45.7	-13	-32.7
1673.2	-46.9	170	1.5	V	3.1	-43.8	-13	-30.8
2509.8	-48.8	309	1.8	H	6.2	-42.6	-13	-29.6
2509.8	-50.2	20	1.9	V	5.6	-44.6	-13	-31.6
3346.4	-50.1	132	1.9	H	6.6	-43.5	-13	-30.5
3346.4	-50.6	204	1.7	V	5.4	-45.2	-13	-32.2
High Channel								
100.01	-73.66	84	-1.2	H	6.6	-67.06	-13	-54.06
219.98	-67.74	151	-1.8	V	1.4	-66.34	-13	-53.34
1697.6	-48.1	21	1.7	H	4.1	-44	-13	-31
1697.6	-41.4	193	2.1	V	3.1	-38.3	-13	-25.3
2546.4	-48	83	2.0	H	6.1	-41.9	-13	-28.9
2546.4	-49.9	349	1.8	V	5.8	-44.1	-13	-31.1
3395.2	-48.6	219	1.5	H	6.2	-42.4	-13	-29.4
3395.2	-49.9	293	1.9	V	5.4	-44.5	-13	-31.5

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
WCDMA Band 5								
Low Channel								
100.01	-75.13	105	-1.2	H	6.6	-68.53	-13	-55.53
219.98	-67.35	30	-1.8	V	1.4	-65.95	-13	-52.95
1652.8	-52.3	331	1.6	H	3.5	-48.8	-13	-35.8
1652.8	-49.4	81	1.7	V	3.1	-46.3	-13	-33.3
2479.2	-41.9	238	1.6	H	6.5	-35.4	-13	-22.4
2479.2	-38.3	164	1.8	V	5.7	-32.6	-13	-19.6
3305.6	-50.6	104	2.1	H	6.4	-44.2	-13	-31.2
3305.6	-48.3	6	1.7	V	5.7	-42.6	-13	-29.6
Middle Channel								
100.01	-75.13	105	-1.2	H	6.6	-68.53	-13	-55.53
219.98	-67.35	30	-1.8	V	1.4	-65.95	-13	-52.95
1673.2	-51	192	1.9	H	3.8	-47.2	-13	-34.2
1673.2	-47.8	0	1.6	V	3.1	-44.7	-13	-31.7
2509.8	-50.1	150	1.7	H	6.2	-43.9	-13	-30.9
2509.8	-47.2	149	2.0	V	5.7	-41.5	-13	-28.5
3346.4	-50.4	77	2.1	H	6.6	-43.8	-13	-30.8
3346.4	-47.6	229	2.1	V	5.4	-42.2	-13	-29.2
High Channel								
100.01	-74.63	325	-1.2	H	6.6	-68.03	-13	-55.03
219.98	-68.31	13	-1.8	V	1.4	-66.91	-13	-53.91
1693.2	-50.1	66	1.7	H	4	-46.1	-13	-33.1
1693.2	-46.5	184	1.8	V	3.1	-43.4	-13	-30.4
2539.8	-52	298	1.7	H	6.1	-45.9	-13	-32.9
2539.8	-48.6	252	1.5	V	5.7	-42.9	-13	-29.9
3386.4	-50	102	1.6	H	6.3	-43.7	-13	-30.7
3386.4	-47.3	30	1.6	V	5.4	-41.9	-13	-28.9

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

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
GSM 1900								
Low Channel								
100.01	-75.28	157	-1.2	H	6.6	-68.68	-13	-55.68
219.98	-68.27	98	-1.8	V	1.4	-66.87	-13	-53.87
3700.4	-53.4	126	1.8	H	8.1	-45.3	-13	-32.3
3700.4	-53.2	26	2.0	V	7.6	-45.6	-13	-32.6
5550.6	-50.6	37	2.0	H	9.6	-41	-13	-28
5550.6	-49.1	91	1.5	V	9.1	-40	-13	-27
Middle Channel								
100.01	-74.86	117	-1.2	H	6.6	-68.26	-13	-55.26
219.98	-66.83	269	-1.8	V	1.4	-65.43	-13	-52.43
3760	-54	14	1.5	H	8.8	-45.2	-13	-32.2
3760	-53.8	29	1.6	V	8	-45.8	-13	-32.8
5640	-51	308	1.5	H	10.2	-40.8	-13	-27.8
5640	-49.2	163	1.5	V	9.4	-39.8	-13	-26.8
High Channel								
100.01	-75.22	184	-1.2	H	6.6	-68.62	-13	-55.62
219.98	-68.25	237	-1.8	V	1.4	-66.85	-13	-53.85
3819.6	-50.9	351	1.8	H	8.7	-42.2	-13	-29.2
3819.6	-52.4	113	1.9	V	8	-44.4	-13	-31.4
5729.4	-51.7	160	1.7	H	10.6	-41.1	-13	-28.1
5729.4	-50	57	1.5	V	10.2	-39.8	-13	-26.8

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
WCDMA Band 2								
Low Channel								
100.01	-74.76	308	-1.2	H	6.6	-68.16	-13	-55.16
219.98	-68.01	144	-1.8	V	1.4	-66.61	-13	-53.61
3704.8	-47.6	164	1.9	H	8.2	-39.4	-13	-26.4
3704.8	-42.9	286	1.8	V	7.6	-35.3	-13	-22.3
5557.2	-47.2	141	1.8	H	9.7	-37.5	-13	-24.5
5557.2	-42.7	320	1.9	V	9.1	-33.6	-13	-20.6
Middle Channel								
100.01	-75.03	51	-1.2	H	6.6	-68.43	-13	-55.43
219.98	-67.73	106	-1.8	V	1.4	-66.33	-13	-53.33
3760	-45.4	237	1.7	H	8.8	-36.6	-13	-23.6
3760	-40.4	13	2.1	V	8	-32.4	-13	-19.4
5640	-47.4	289	1.6	H	10.2	-37.2	-13	-24.2
5640	-45.7	27	1.9	V	9.4	-36.3	-13	-23.3
High Channel								
100.01	-74.70	340	-1.2	H	6.6	-68.10	-13	-55.10
219.98	-67.75	156	-1.8	V	1.4	-66.35	-13	-53.35
3815.2	-41.2	275	1.9	H	8.7	-32.5	-13	-19.5
3815.2	-35.8	107	1.9	V	7.9	-27.9	-13	-14.9
5722.8	-44.6	352	1.5	H	10.6	-34	-13	-21
5722.8	-43.9	15	1.8	V	10.1	-33.8	-13	-20.8

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

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
WCDMA Band 4								
Low Channel								
100.01	-73.82	332	-1.2	H	6.6	-67.22	-13	-54.22
219.98	-67.19	191	-1.8	V	1.4	-65.79	-13	-52.79
3424.8	-44.8	121	1.9	H	6.4	-38.4	-13	-25.4
3424.8	-45.8	93	1.6	V	5.8	-40	-13	-27
5137.2	-52.5	183	1.5	H	11.4	-41.1	-13	-28.1
5137.2	-49.8	350	1.6	V	10.8	-39	-13	-26
Middle Channel								
100.01	-74.51	35	-1.2	H	6.6	-67.91	-13	-54.91
219.98	-67.70	230	-1.8	V	1.4	-66.30	-13	-53.30
3465.2	-44.9	232	2.0	H	7	-37.9	-13	-24.9
3465.2	-47.8	166	1.9	V	6.2	-41.6	-13	-28.6
5197.8	-48.1	81	2.1	H	10.4	-37.7	-13	-24.7
5197.8	-44.2	2	1.6	V	9.8	-34.4	-13	-21.4
High Channel								
100.01	-75.46	194	-1.2	H	6.6	-68.86	-13	-55.86
219.98	-66.79	149	-1.8	V	1.4	-65.39	-13	-52.39
3505.2	-46.6	265	1.8	H	7.8	-38.8	-13	-25.8
3505.2	-47.7	182	1.8	V	6.5	-41.2	-13	-28.2
5257.8	-46.6	305	1.7	H	9.4	-37.2	-13	-24.2
5257.8	-44.7	152	1.6	V	9	-35.7	-13	-22.7

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

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 2								
Test frequency range: 30MHz-20GHz								
1.4MHz bandwidth, Low Channel								
100.01	-74.47	96	-1.2	H	6.6	-67.87	-13	-54.87
219.98	-66.81	137	-1.8	V	1.4	-65.41	-13	-52.41
3701.4	-41.9	111	1.7	H	8.1	-33.8	-13	-20.8
3701.4	-37.6	204	1.6	V	7.6	-30	-13	-17
5552.1	-39.5	44	1.7	H	9.6	-29.9	-13	-16.9
5552.1	-34.9	167	1.9	V	9.1	-25.8	-13	-12.8
1.4MHz bandwidth, Middle Channel								
100.01	-74.57	126	-1.2	H	6.6	-67.97	-13	-54.97
219.98	-67.59	250	-1.8	V	1.4	-66.19	-13	-53.19
3760	-38.6	253	1.5	H	8.8	-29.8	-13	-16.8
3760	-33.6	336	1.6	V	8	-25.6	-13	-12.6
5640	-37.9	277	2.0	H	10.2	-27.7	-13	-14.7
5640	-36.9	29	1.8	V	9.4	-27.5	-13	-14.5
1.4MHz bandwidth, High Channel								
100.01	-75.21	254	-1.2	H	6.6	-68.61	-13	-55.61
219.98	-68.32	83	-1.8	V	1.4	-66.92	-13	-53.92
3818.6	-34.9	46	1.7	H	8.7	-26.2	-13	-13.2
3818.6	-30.5	60	1.5	V	8	-22.5	-13	-9.5
5727.9	-35.4	151	1.6	H	10.6	-24.8	-13	-11.8
5727.9	-34.5	329	1.8	V	10.2	-24.3	-13	-11.3

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 4								
Test frequency range: 30MHz-20GHz								
1.4MHz bandwidth, Low Channel								
100.01	-75.21	243	-1.2	H	6.6	-68.61	-13	-55.61
219.98	-66.63	154	-1.8	V	1.4	-65.23	-13	-52.23
3421.4	-38.77	24	2.0	H	6.37	-32.4	-13	-19.4
3421.4	-41.8	83	2.1	V	5.7	-36.1	-13	-23.1
5132.1	-41.23	338	2.1	H	11.33	-29.9	-13	-16.9
5132.1	-39.67	255	1.6	V	10.77	-28.9	-13	-15.9
1.4MHz bandwidth, Middle Channel								
100.01	-74.97	36	-1.2	H	6.6	-68.37	-13	-55.37
219.98	-67.72	254	-1.8	V	1.4	-66.32	-13	-53.32
3465	-39.86	97	2.0	H	6.96	-32.9	-13	-19.9
3465	-42.62	216	2.0	V	6.22	-36.4	-13	-23.4
5197.5	-42.56	130	2.1	H	10.36	-32.2	-13	-19.2
5197.5	-38.55	20	1.7	V	9.85	-28.7	-13	-15.7
1.4MHz bandwidth, High Channel								
100.01	-74.14	201	-1.2	H	6.6	-67.54	-13	-54.54
219.98	-66.71	47	-1.8	V	1.4	-65.31	-13	-52.31
3508.6	-40.98	23	1.8	H	7.78	-33.2	-13	-20.2
3508.6	-43.77	219	1.7	V	6.57	-37.2	-13	-24.2
5262.9	-39.25	232	1.9	H	9.45	-29.8	-13	-16.8
5262.9	-39.55	168	1.9	V	8.95	-30.6	-13	-17.6

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 5								
Test frequency range: 30MHz-10GHz								
1.4MHz bandwidth, Low Channel								
100.01	-74.98	170	-1.2	H	6.6	-68.38	-13	-55.38
219.98	-66.99	252	-1.8	V	1.4	-65.59	-13	-52.59
1649.4	-52.3	131	1.7	H	3.2	-49.1	-13	-36.1
1649.4	-53.7	174	1.7	V	3.1	-50.6	-13	-37.6
2474.1	-46.5	202	2.0	H	6.6	-39.9	-13	-26.9
2474.1	-42.8	262	1.9	V	5.8	-37	-13	-24
3298.8	-50	33	2.0	H	6.4	-43.6	-13	-30.6
3298.8	-49.7	41	1.8	V	5.7	-44	-13	-31
1.4MHz bandwidth, Middle Channel								
100.01	-74.04	53	-1.2	H	6.6	-67.44	-13	-54.44
219.98	-67.64	134	-1.8	V	1.4	-66.24	-13	-53.24
1673	-50	141	1.6	H	3.8	-46.2	-13	-33.2
1673	-49.4	45	1.8	V	3.1	-46.3	-13	-33.3
2509.5	-50.7	135	1.9	H	6.2	-44.5	-13	-31.5
2509.5	-47.8	79	1.7	V	5.6	-42.2	-13	-29.2
3346	-50.4	310	1.5	H	6.6	-43.8	-13	-30.8
3346	-49.6	83	1.8	V	5.4	-44.2	-13	-31.2
1.4MHz bandwidth, High Channel								
100.01	-75.27	278	-1.2	H	6.6	-68.67	-13	-55.67
219.98	-67.70	333	-1.8	V	1.4	-66.30	-13	-53.30
1696.6	-50.5	80	1.8	H	4.1	-46.4	-13	-33.4
1696.6	-49.6	137	1.8	V	3.1	-46.5	-13	-33.5
2544.9	-48.3	36	2.0	H	6.1	-42.2	-13	-29.2
2544.9	-46.7	118	1.5	V	5.8	-40.9	-13	-27.9
3393.2	-48.3	87	2.0	H	6.3	-42	-13	-29
3393.2	-48.8	273	1.8	V	5.4	-43.4	-13	-30.4

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 7								
Test frequency range: 30MHz-26.5GHz								
5MHz bandwidth, Low Channel								
100.01	-74.10	109	-1.2	H	6.6	-67.50	-25	-42.50
219.98	-67.46	15	-1.8	V	1.4	-66.06	-25	-41.06
5005	-55.23	6	1.6	H	10.83	-44.4	-25	-19.4
5005	-53.46	298	1.9	V	10.16	-43.3	-25	-18.3
7507.5	-52.25	358	1.8	H	20.35	-31.9	-25	-6.9
7507.5	-56.35	305	1.5	V	20.05	-36.3	-25	-11.3
5MHz bandwidth, Middle Channel								
100.01	-74.10	109	-1.2	H	6.6	-67.50	-25	-42.50
219.98	-67.46	15	-1.8	V	1.4	-66.06	-25	-41.06
5070	-55.44	108	1.6	H	11.14	-44.3	-25	-19.3
5070	-54.08	204	1.5	V	10.78	-43.3	-25	-18.3
7605	-55.8	89	1.7	H	21.2	-34.6	-25	-9.6
7605	-59.57	40	1.8	V	20.07	-39.5	-25	-14.5
5MHz bandwidth, High Channel								
100.01	-74.91	57	-1.2	H	6.6	-68.31	-25	-43.31
219.98	-66.80	55	-1.8	V	1.4	-65.40	-25	-40.40
5135	-55.34	244	2.1	H	11.34	-44	-25	-19
5135	-53.36	176	1.6	V	10.76	-42.6	-25	-17.6
7702.5	-56.69	352	2.0	H	21.19	-35.5	-25	-10.5
7702.5	-60.79	187	1.9	V	20.99	-39.8	-25	-14.8

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 12								
Test frequency range: 30MHz-8GHz								
5MHz bandwidth, Low Channel								
100.01	-75.02	216	-1.2	H	6.6	-68.42	-13	-55.42
219.98	-67.56	304	-1.8	V	1.4	-66.16	-13	-53.16
1399.4	-52.3	279	1.9	H	5.9	-46.4	-13	-33.4
1399.4	-54.8	189	2.0	V	5.9	-48.9	-13	-35.9
2099.1	-48.9	330	1.5	H	6.3	-42.6	-13	-29.6
2099.1	-50.2	341	1.9	V	5.1	-45.1	-13	-32.1
5MHz bandwidth, Middle Channel								
100.01	-74.34	65	-1.2	H	6.6	-67.74	-13	-54.74
219.98	-67.40	183	-1.8	V	1.4	-66.00	-13	-53.00
1415	-52.9	267	1.8	H	5.7	-47.2	-13	-34.2
1415	-54.6	193	1.5	V	5.4	-49.2	-13	-36.2
2122.5	-48.1	241	1.9	H	6.7	-41.4	-13	-28.4
2122.5	-48.8	302	1.8	V	5.8	-43	-13	-30
5MHz bandwidth, High Channel								
100.01	-73.66	125	-1.2	H	6.6	-67.06	-13	-54.06
219.98	-67.70	188	-1.8	V	1.4	-66.30	-13	-53.30
1430.6	-53	338	1.5	H	5.4	-47.6	-13	-34.6
1430.6	-55	252	1.5	V	4.8	-50.2	-13	-37.2
2145.9	-48.8	133	1.9	H	7	-41.8	-13	-28.8
2145.9	-50.3	2	2.0	V	6.6	-43.7	-13	-30.7

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band17								
Test frequency range: 30MHz-8GHz								
5MHz bandwidth, Low Channel								
100.01	-74.99	60	-1.2	H	6.6	-68.39	-13	-55.39
219.98	-68.08	9	-1.8	V	1.4	-66.68	-13	-53.68
1413	-55.2	168	1.9	H	5.7	-49.5	-13	-36.5
1413	-56.7	46	1.5	V	5.4	-51.3	-13	-38.3
2119.5	-41.8	281	2.1	H	6.6	-35.2	-13	-22.2
2119.5	-42.9	217	2.0	V	5.7	-37.2	-13	-24.2
2826	-56.4	228	1.8	H	7.1	-49.3	-13	-36.3
2826	-54.8	218	1.7	V	6.5	-48.3	-13	-35.3
5MHz bandwidth, Middle Channel								
100.01	-74.46	263	-1.2	H	6.6	-67.86	-13	-54.86
219.98	-67.62	355	-1.8	V	1.4	-66.22	-13	-53.22
1420	-54.2	187	1.8	H	5.6	-48.6	-13	-35.6
1420	-55.6	235	1.7	V	5.2	-50.4	-13	-37.4
2130	-43	272	1.6	H	6.8	-36.2	-13	-23.2
2130	-44.7	195	1.9	V	6.1	-38.6	-13	-25.6
2840	-55.4	53	1.6	H	7	-48.4	-13	-35.4
2840	-53.8	85	1.6	V	6.6	-47.2	-13	-34.2
5MHz bandwidth, High Channel								
100.01	-74.48	305	-1.2	H	6.6	-67.88	-13	-54.88
219.98	-67.69	288	-1.8	V	1.4	-66.29	-13	-53.29
1427	-54.6	338	1.9	H	5.5	-49.1	-13	-36.1
1427	-56.4	348	2.0	V	4.9	-51.5	-13	-38.5
2140.5	-42.6	327	1.5	H	7	-35.6	-13	-22.6
2140.5	-44.6	267	1.6	V	6.4	-38.2	-13	-25.2
2854	-57.1	76	1.8	H	7.4	-49.7	-13	-36.7
2854	-55.6	164	2.0	V	6.4	-49.2	-13	-36.2

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 38								
Test frequency range: 30MHz-26.5GHz								
5MHz, Low Channel								
100.01	-74.61	205	-1.2	H	6.6	-68.01	-25	-43.01
219.98	-66.44	40	-1.8	V	1.4	-65.04	-25	-40.04
5145	-53.08	13	2.0	H	11.38	-41.7	-25	-16.7
5145	-52.12	52	2.0	V	10.72	-41.4	-25	-16.4
7717.5	-57.4	329	1.5	H	21.2	-36.2	-25	-11.2
7717.5	-62.1	29	1.8	V	20.2	-41.9	-25	-16.9
5MHz, Middle Channel								
100.01	-75.57	179	-1.2	H	6.6	-68.97	-25	-43.97
219.98	-67.09	221	-1.8	V	1.4	-65.69	-25	-40.69
5190	-51.82	236	2.0	H	10.52	-41.3	-25	-16.3
5190	-51.58	182	1.5	V	9.98	-41.6	-25	-16.6
7785	-53.26	188	2.0	H	18.26	-35	-25	-10
7785	-57.49	22	2.1	V	17.99	-39.5	-25	-14.5
5MHz, High Channel								
100.01	-74.19	154	-1.2	H	6.6	-67.59	-25	-42.59
219.98	-68.17	220	-1.8	V	1.4	-66.77	-25	-41.77
5235	-51.47	30	1.9	H	9.67	-41.8	-25	-16.8
5235	-50.04	50	1.8	V	9.24	-40.8	-25	-15.8
7852.5	-54.43	165	1.7	H	18.23	-36.2	-25	-11.2
7852.5	-58.52	129	1.8	V	17.62	-40.9	-25	-15.9

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 41								
Test frequency range: 1-26.5GHz								
5MHz, Low Channel								
100.01	-73.98	106	-1.2	H	6.6	-67.38	-25	-42.38
219.98	-68.34	30	-1.8	V	1.4	-66.94	-25	-41.94
5075	-52.7	125	2.1	H	11.2	-41.5	-25	-16.5
5075	-51.8	161	2.0	V	10.8	-41	-25	-16
7612.5	-55.7	287	1.9	H	21.2	-34.5	-25	-9.5
7612.5	-59.6	314	1.5	V	20.2	-39.4	-25	-14.4
5MHz bandwidth, Middle Channel								
100.01	-75.31	50	-1.2	H	6.6	-68.71	-25	-43.71
219.98	-68.19	107	-1.8	V	1.4	-66.79	-25	-41.79
5190	-52.12	272	1.7	H	10.52	-41.6	-25	-16.6
5190	-52.7	93	2.1	V	10	-42.7	-25	-17.7
7785	-52.3	276	1.9	H	18.3	-34	-25	-9
7785	-58.1	28	2.1	V	18	-40.1	-25	-15.1
5MHz bandwidth, High Channel								
100.01	-75.42	94	-1.2	H	6.6	-68.82	-25	-43.82
219.98	-67.64	171	-1.8	V	1.4	-66.24	-25	-41.24
5305	-47	28	2.1	H	9.6	-37.4	-25	-12.4
5305	-44.2	216	1.6	V	8.8	-35.4	-25	-10.4
7957.5	-52.6	171	1.9	H	18.9	-33.7	-25	-8.7
7957.5	-59.1	308	1.8	V	18.5	-40.6	-25	-15.6

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 66								
Test frequency range: 30MHz-20GHz								
5MHz bandwidth, Low Channel								
100.01	-73.75	188	-1.2	H	6.6	-67.15	-13	-54.15
219.98	-67.57	67	-1.8	V	1.4	-66.17	-13	-53.17
3421.4	-38.6	296	1.5	H	6.4	-32.2	-13	-19.2
3421.4	-41.5	164	1.6	V	5.7	-35.8	-13	-22.8
5132.1	-41.3	162	1.6	H	11.7	-29.6	-13	-16.6
5132.1	-39.6	345	1.9	V	10.8	-28.8	-13	-15.8
5MHz bandwidth, Middle Channel								
100.01	-73.68	87	-1.2	H	6.6	-67.08	-13	-54.08
219.98	-66.81	317	-1.8	V	1.4	-65.41	-13	-52.41
3510	-41.3	264	1.6	H	7.8	-33.5	-13	-20.5
3510	-43.9	112	1.9	V	6.6	-37.3	-13	-24.3
5265	-38.9	4	1.6	H	9.5	-29.4	-13	-16.4
5265	-38.4	73	1.9	V	8.9	-29.5	-13	-16.5
5MHz bandwidth, High Channel								
100.01	-74.49	143	-1.2	H	6.6	-67.89	-13	-54.89
219.98	-66.95	75	-1.8	V	1.4	-65.55	-13	-52.55
3558.6	-40.1	338	2.0	H	7.8	-32.3	-13	-19.3
3558.6	-40.9	258	1.8	V	7	-33.9	-13	-20.9
5337.9	-43.7	17	1.5	H	9.4	-34.3	-13	-21.3
5337.9	-42.6	341	1.5	V	8.7	-33.9	-13	-20.9

Note:

Absolute Level = Reading Level + Substituted Factor

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

Margin = Limit- Absolute Level

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

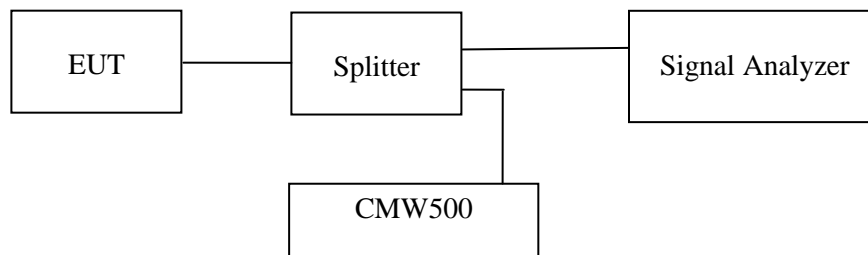
According to §24.238(a), the power of any emissions outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

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

Test Procedure

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

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



Test Data

Environmental Conditions

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

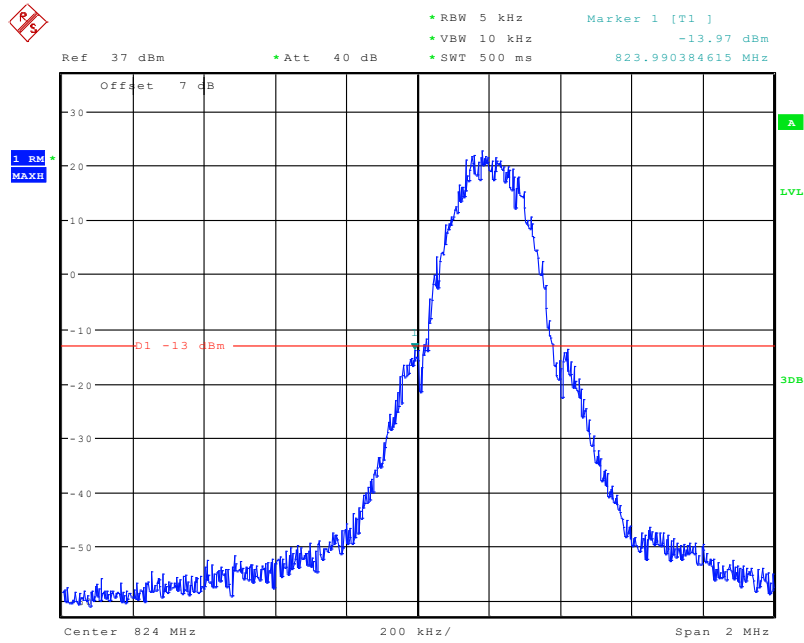
The testing was performed by Gala Liu from 2022-03-02 to 2022-03-22.

EUT operation mode: Transmitting (Worst case)

Test Result: Pass

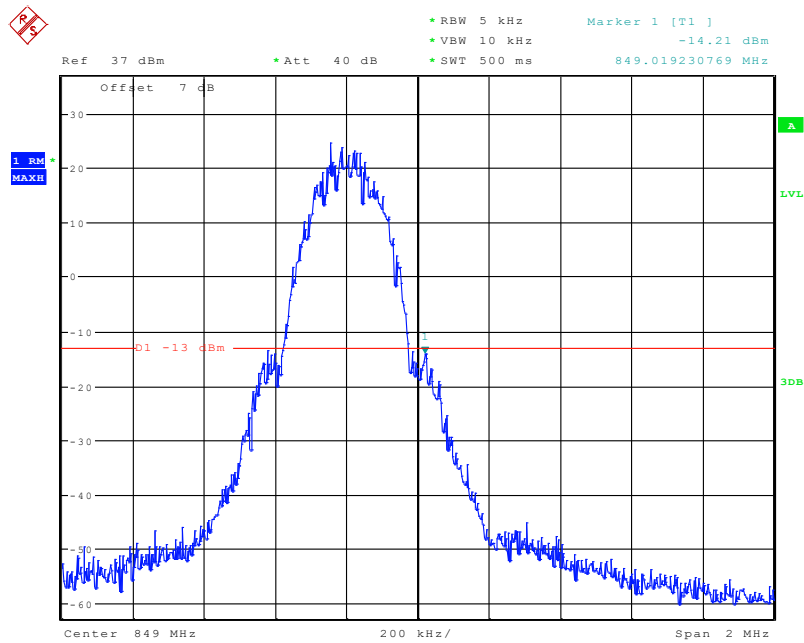
Please refer to the following plots.

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



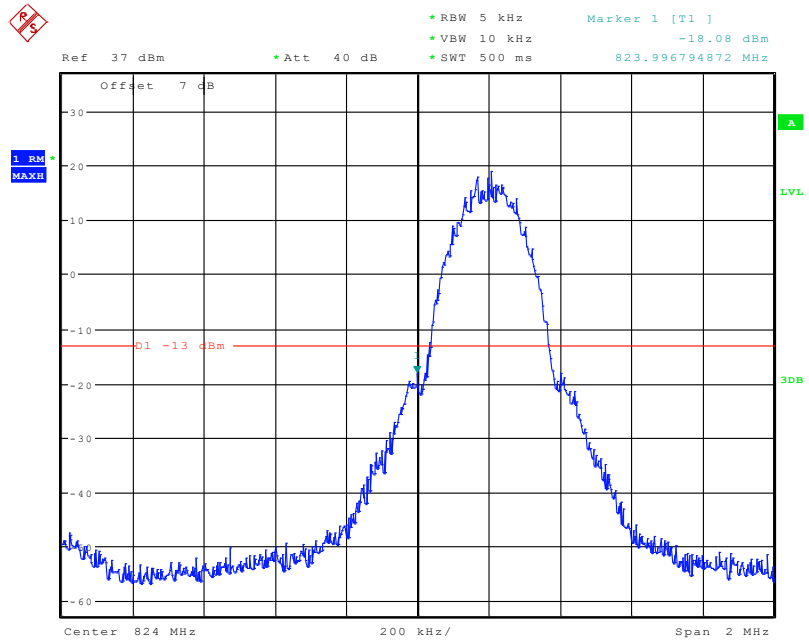
Date: 3.MAR.2022 10:53:16

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



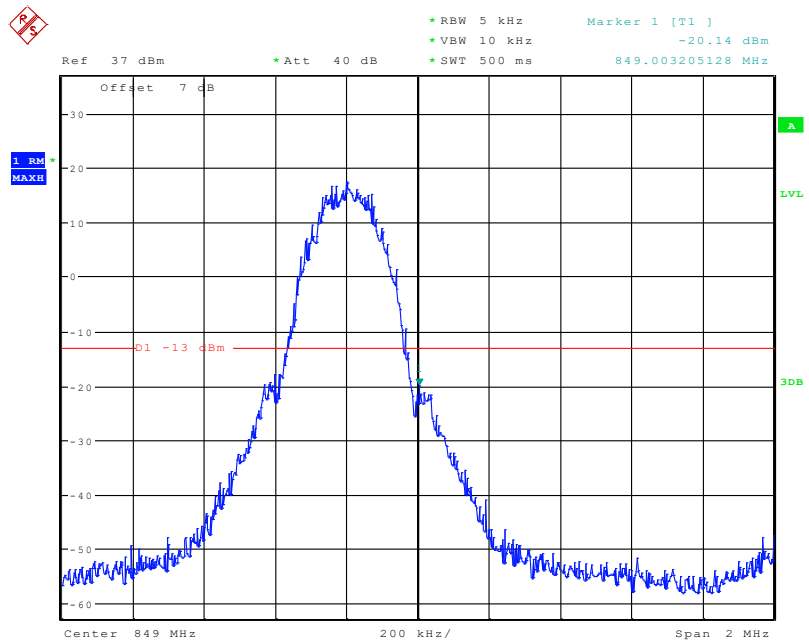
Date: 3.MAR.2022 10:51:42

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



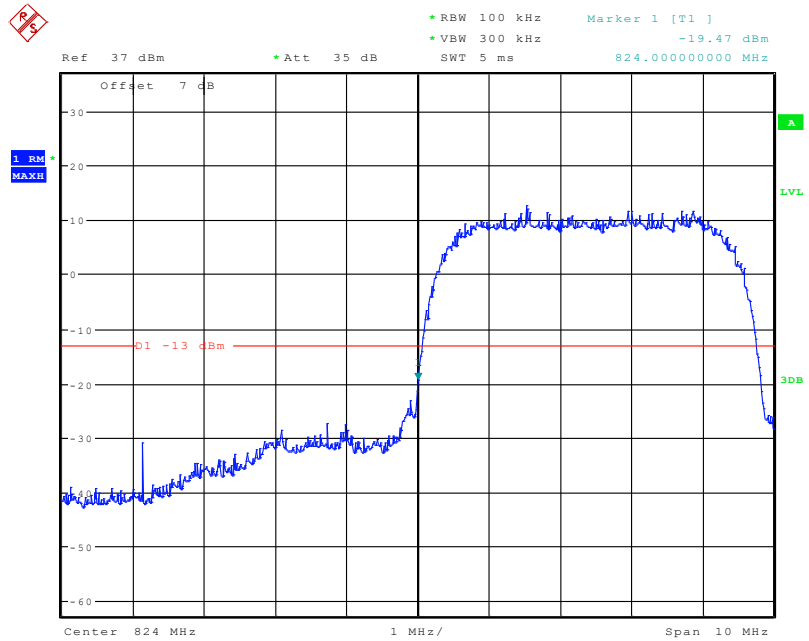
Date: 3.MAR.2022 10:55:33

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



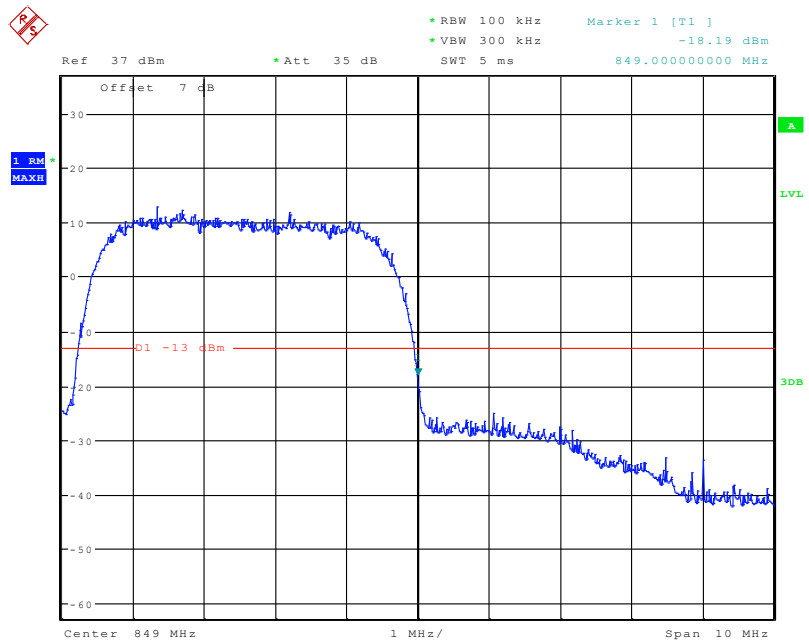
Date: 3.MAR.2022 10:56:12

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



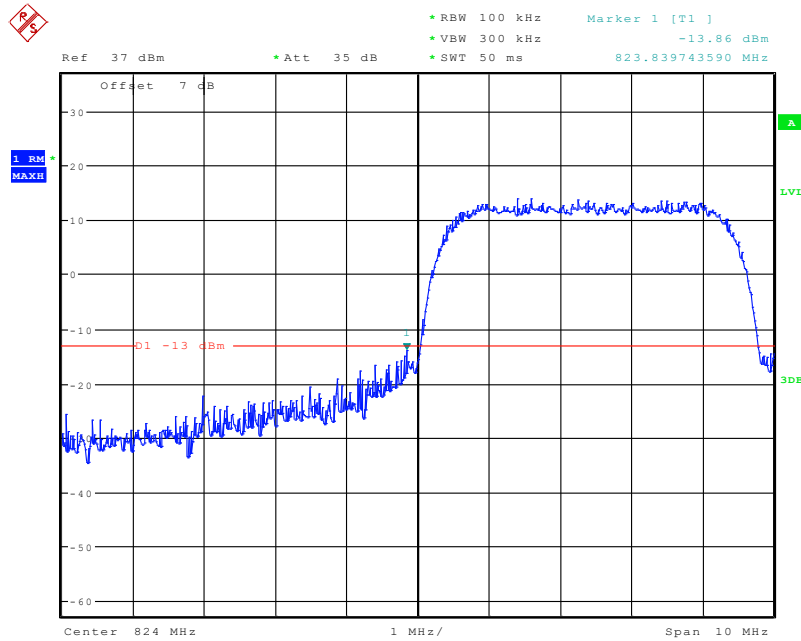
Date: 3.MAR.2022 08:57:21

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



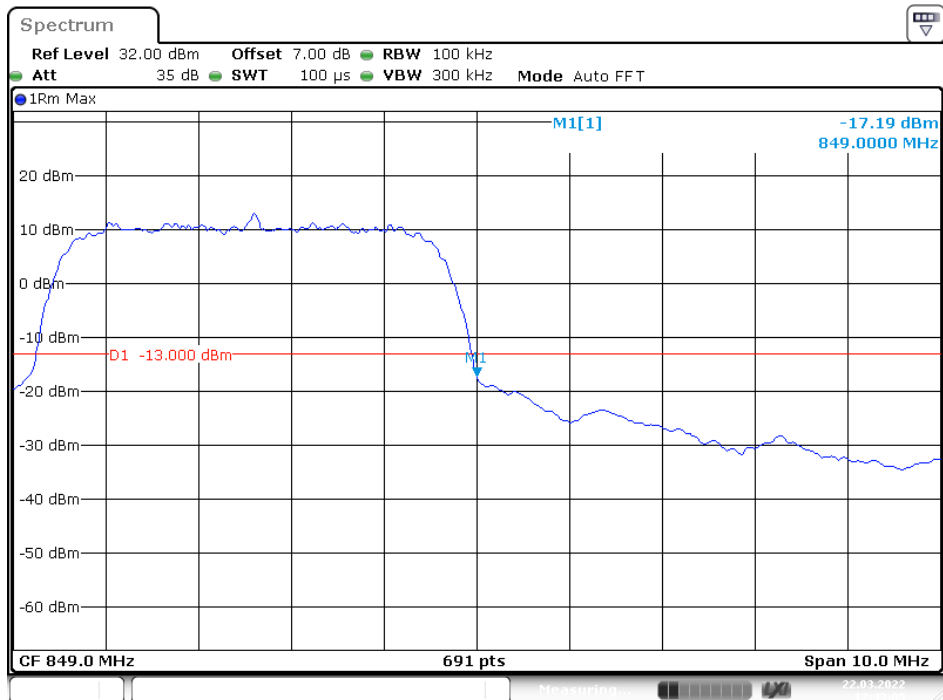
Date: 3.MAR.2022 08:57:55

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



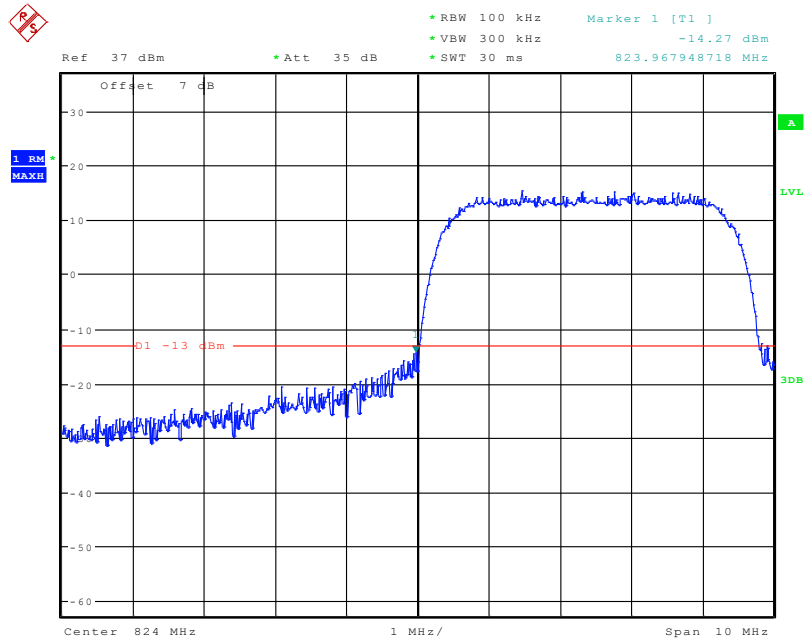
Date: 3.MAR.2022 09:41:48

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



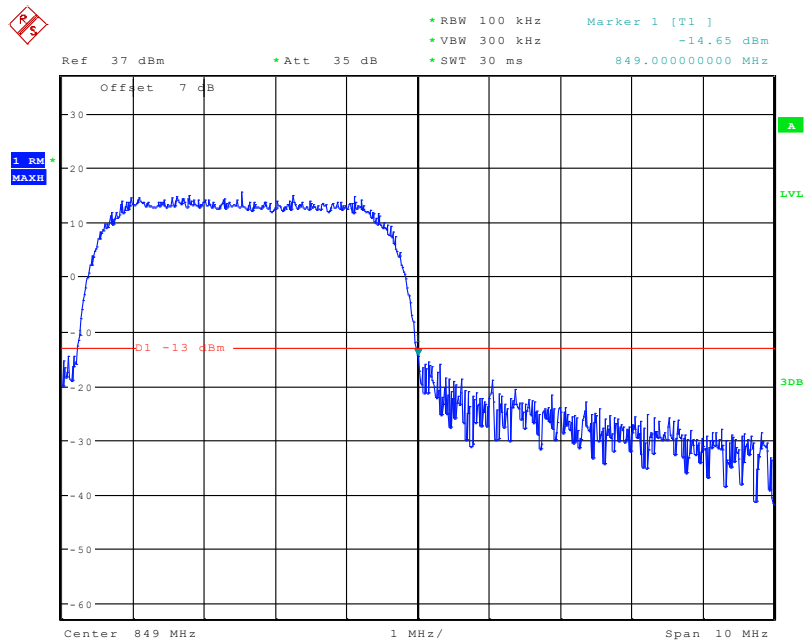
Date: 22.MAR.2022 12:43:06

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



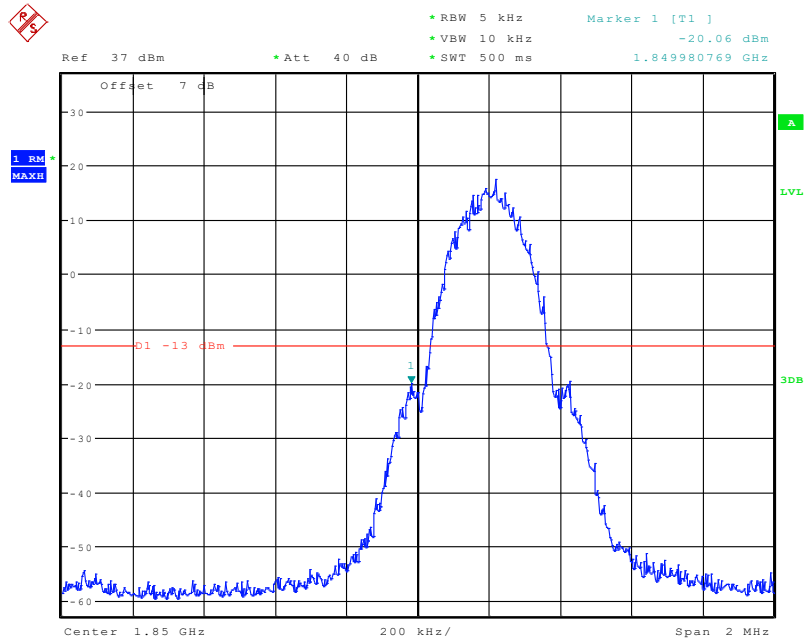
Date: 3.MAR.2022 09:46:04

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



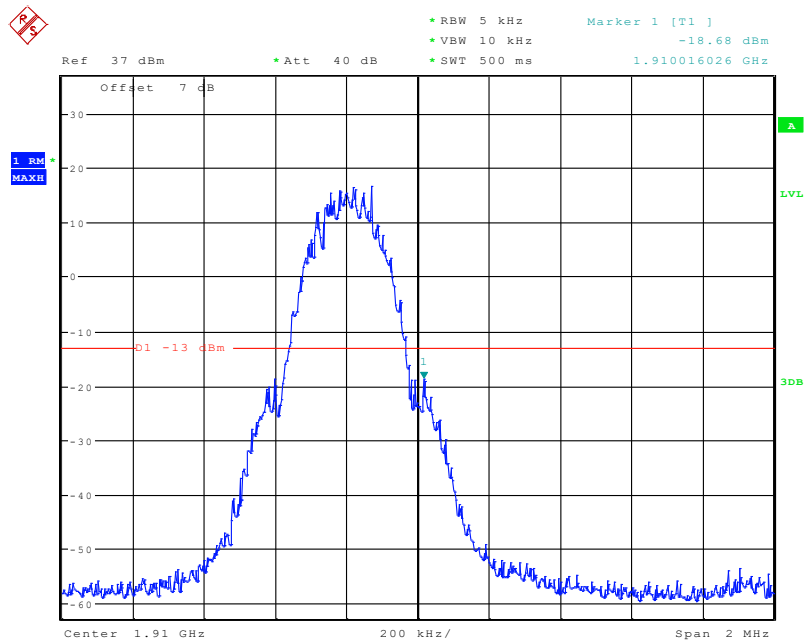
Date: 3.MAR.2022 09:46:26

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



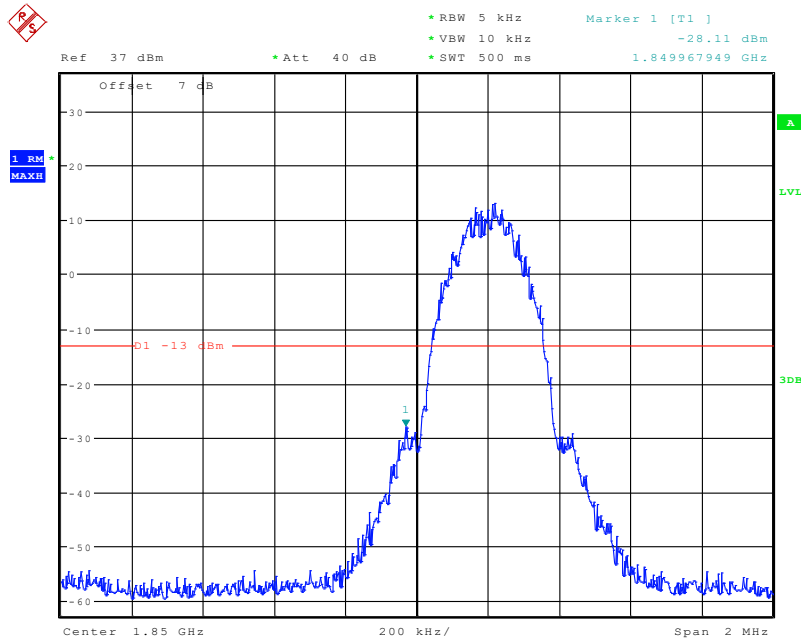
Date: 3.MAR.2022 11:10:11

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



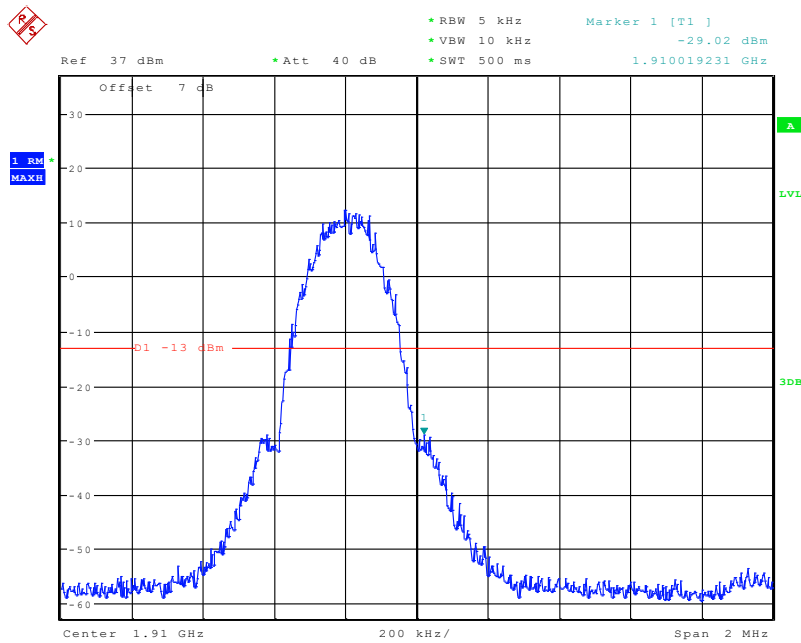
Date: 3.MAR.2022 11:10:50

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



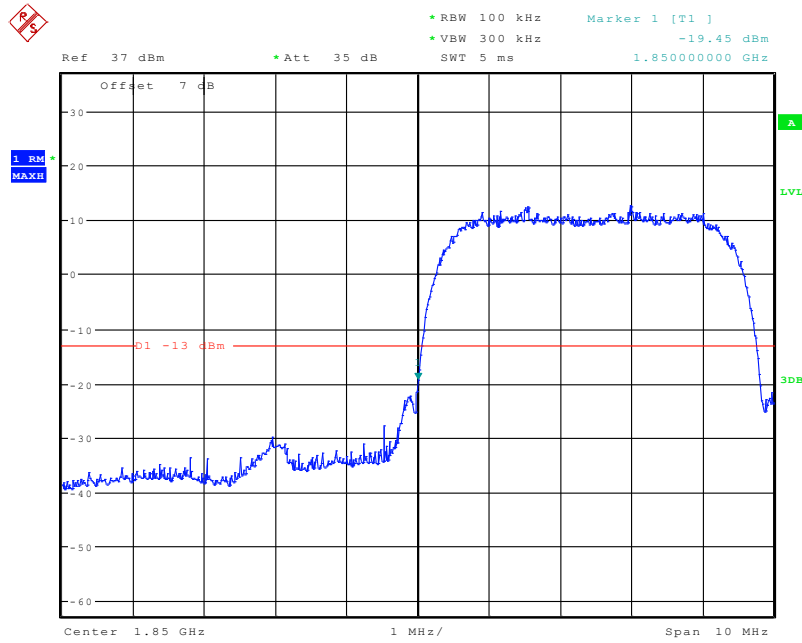
Date: 3.MAR.2022 11:08:20

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



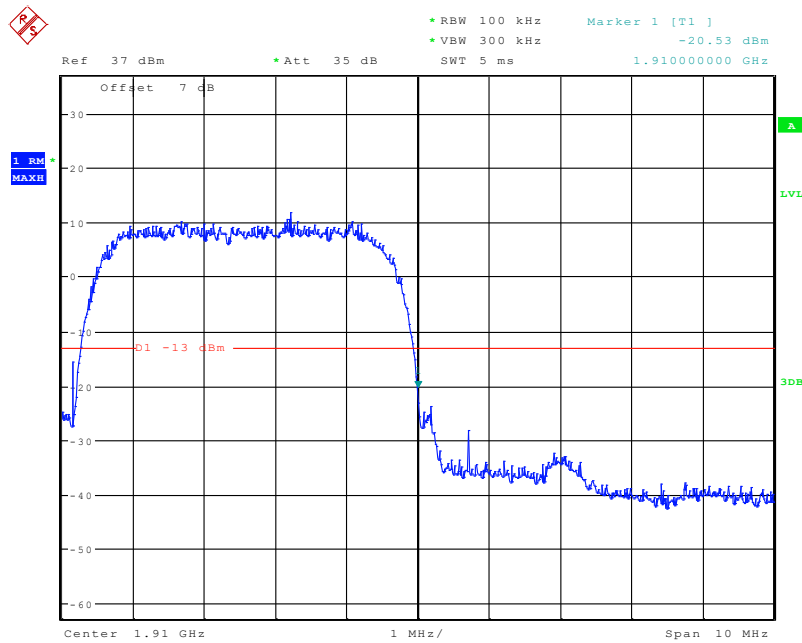
Date: 3.MAR.2022 11:07:32

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



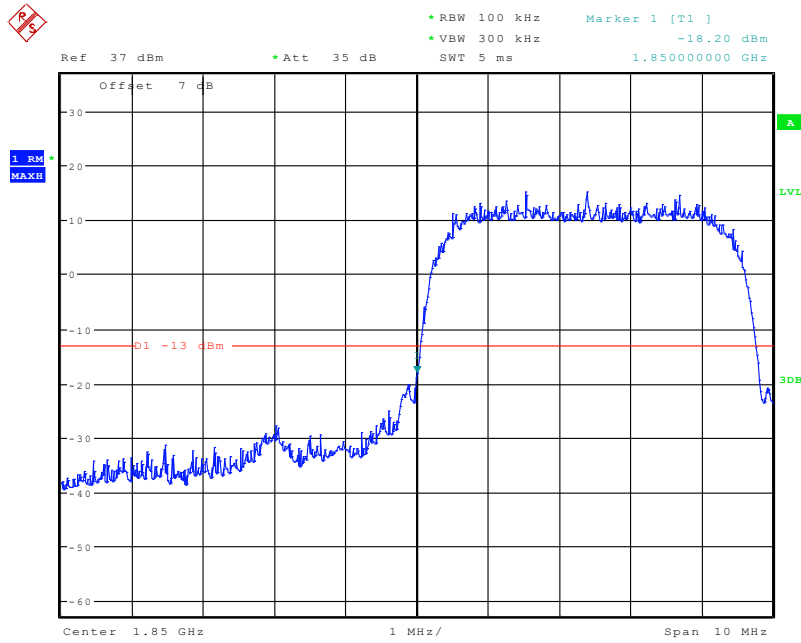
Date: 3.MAR.2022 08:54:18

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



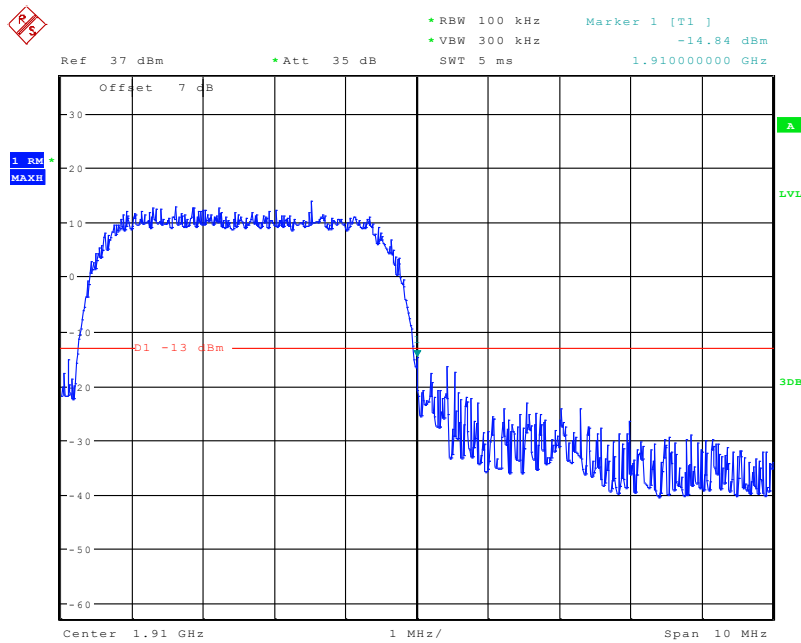
Date: 3.MAR.2022 08:55:20

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



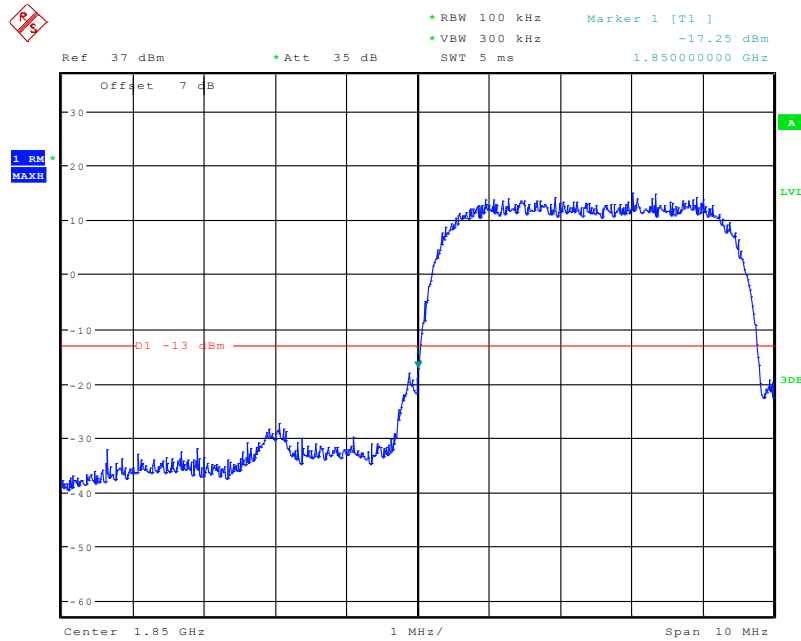
Date: 3.MAR.2022 09:29:06

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



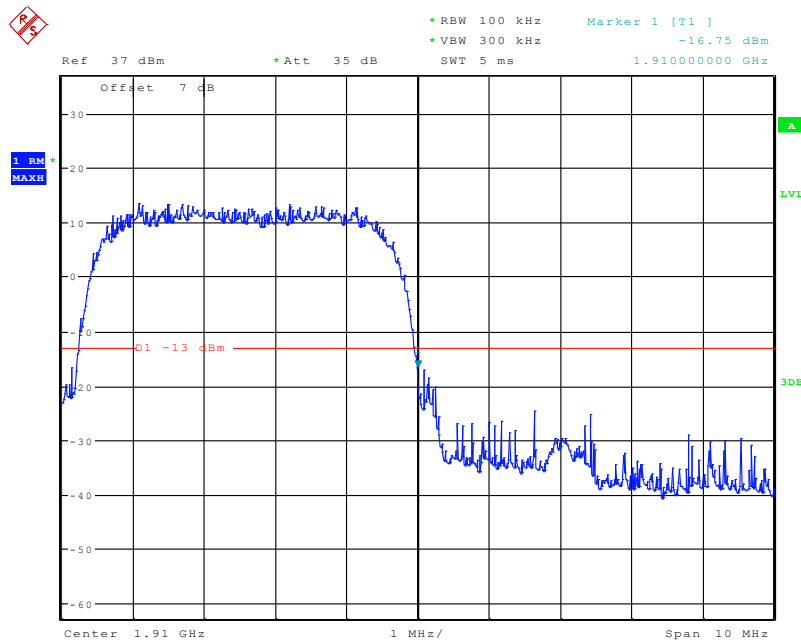
Date: 3.MAR.2022 09:28:49

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



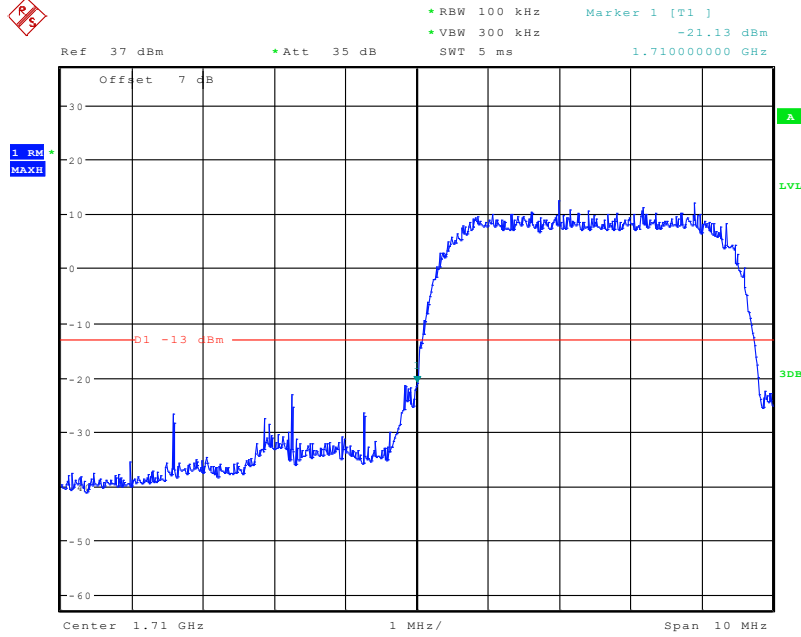
Date: 3.MAR.2022 09:43:32

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



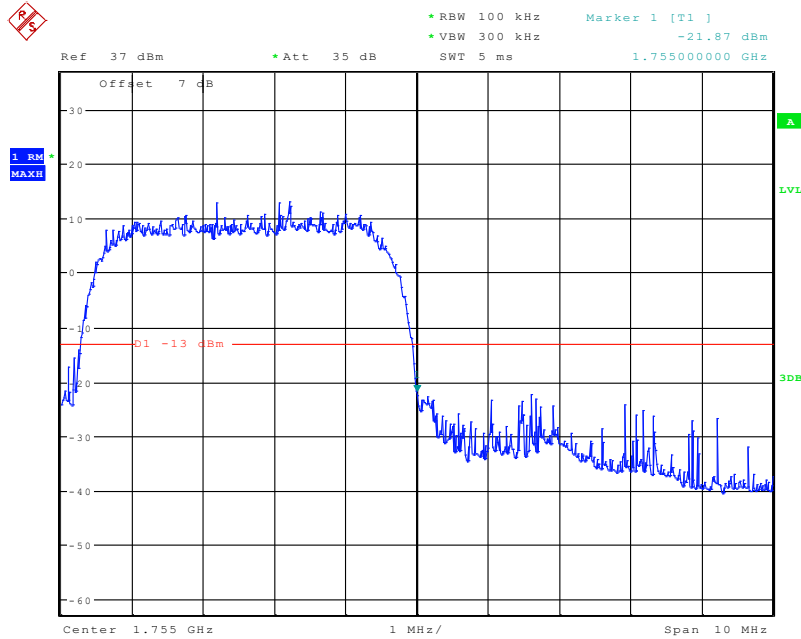
Date: 3.MAR.2022 09:44:19

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



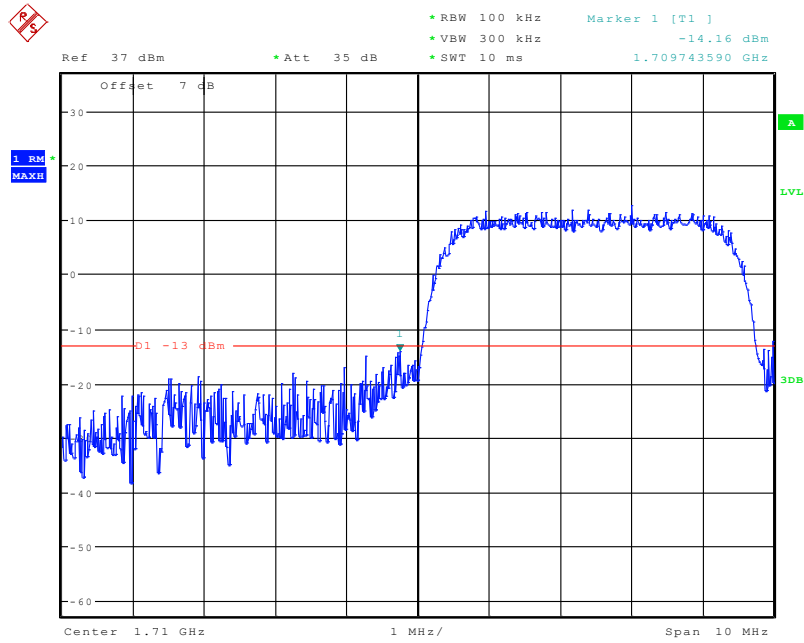
Date: 3.MAR.2022 08:56:50

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



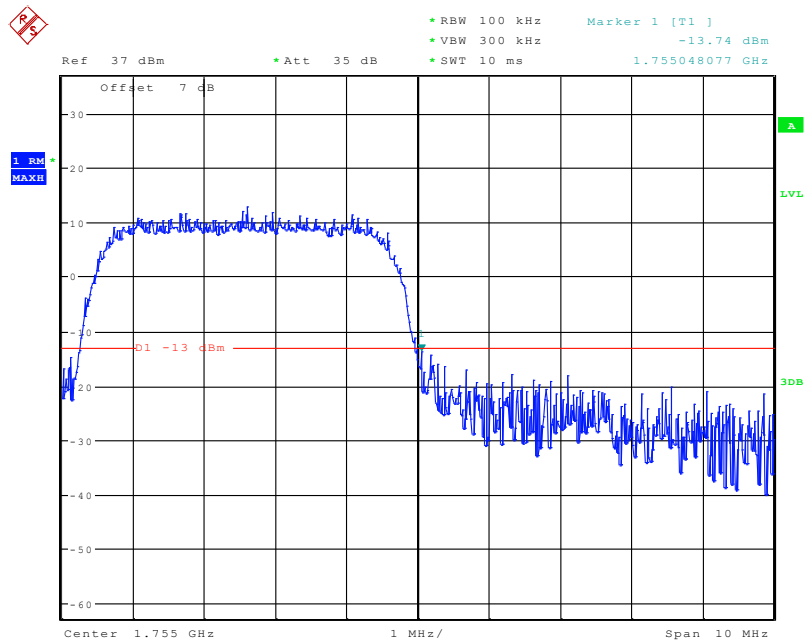
Date: 3.MAR.2022 08:56:04

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



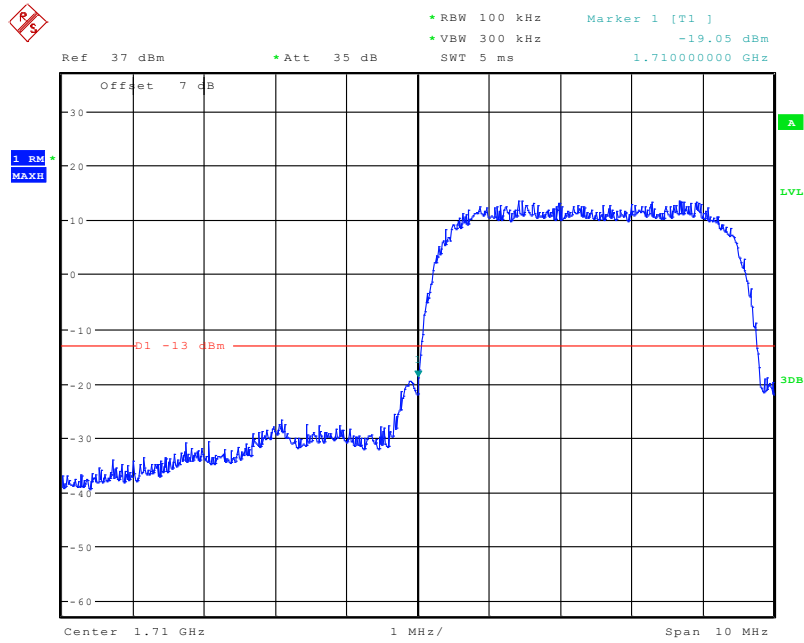
Date: 3.MAR.2022 09:28:25

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



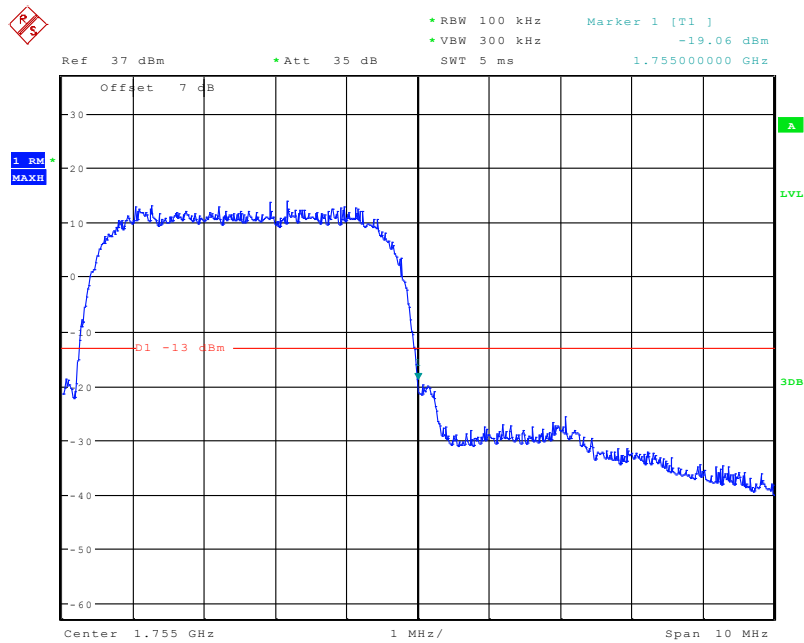
Date: 3.MAR.2022 09:27:09

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



Date: 3.MAR.2022 09:44:45

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



Date: 3.MAR.2022 09:45:21

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

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

Applicable Standard

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

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

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

Frequency Tolerance for Transmitters in the Public Mobile Services

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

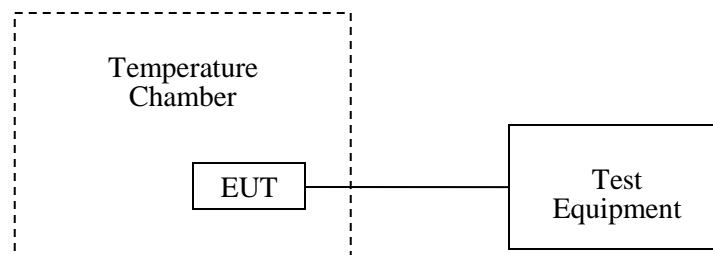
According to §24.235& §27.54, the frequency stability shall be sufficient to ensure that the fundamental emissions stays within the authorized frequency block.

Test Procedure

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

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

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



Test Data**Environmental Conditions**

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

The testing was performed by Gala Liu from 2022-03-02 to 2022-03-03.

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	N.V.	7	0.0084	2.5
-20		8	0.0096	2.5
-10		4	0.0048	2.5
0		6	0.0072	2.5
10		3	0.0036	2.5
20		12	0.0144	2.5
30		6	0.0072	2.5
40		4	0.0048	2.5
50		8	0.0096	2.5
20		L.V.	2	0.0024
	H.V.	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	N.V.	8	0.0096	2.5
-20		6	0.0072	2.5
-10		3	0.0036	2.5
0		4	0.0048	2.5
10		6	0.0072	2.5
20		3	0.0036	2.5
30		7	0.0084	2.5
40		3	0.0036	2.5
50		2	0.0024	2.5
20		L.V.	4	0.0048
	H.V.	3	0.0036	2.5

WCDMA Mode

Middle Channel, $f_0 = 836.6\text{MHz}$				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	N.V.	-8.97	-0.0107	2.5
-20		-11.26	-0.0135	2.5
-10		-10.12	-0.0121	2.5
0		-9.36	-0.0112	2.5
10		-9.17	-0.0110	2.5
20		-9.01	-0.0108	2.5
30		-10.11	-0.0121	2.5
40		-10.35	-0.0124	2.5
50		-9.76	-0.0117	2.5
20		L.V.	-9.82	-0.0117
	H.V.	-9.95	-0.0119	2.5

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

Middle Channel, $f_0 = 1880.0$ MHz				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	N.V.	3	0.0016	pass
-20		4	0.0021	pass
-10		6	0.0032	pass
0		7	0.0037	pass
10		2	0.0011	pass
20		26	0.0138	pass
30		3	0.0016	pass
40		4	0.0021	pass
50		5	0.0027	pass
20		L.V.	6	0.0032
	H.V.	3	0.0016	pass

EDGE Mode

Middle Channel, $f_0 = 1880.0$ MHz				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	N.V.	4	0.0021	pass
-20		6	0.0032	pass
-10		8	0.0043	pass
0		10	0.0053	pass
10		4	0.0021	pass
20		31	0.0165	pass
30		3	0.0016	pass
40		5	0.0027	pass
50		7	0.0037	pass
20		L.V.	3	0.0016
	H.V.	4	0.0021	pass

WCDMA Mode

Middle Channel, $f_0 = 1880.0$ MHz				
Temperature (°C)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	N.V.	-9.97	-0.0053	pass
-20		-10.11	-0.0054	pass
-10		-10.26	-0.0055	pass
0		-8.97	-0.0048	pass
10		-8.96	-0.0048	pass
20		-8.87	-0.0047	pass
30		-9.15	-0.0049	pass
40		-9.33	-0.0050	pass
50		-10.23	-0.0054	pass
20	L.V.	-9.56	-0.0051	pass
	H.V.	-9.64	-0.0051	pass

AWS Band (Part 27)

Temperature (°C)	Power Supplied (V_{DC})	F_L (MHz)	F_H (MHz)	F_L Limit (MHz)	F_H Limit (MHz)
-30	N.V.	1710.0172	1754.9728	1710	1755
-20		1710.0169	1754.9726	1710	1755
-10		1710.0158	1754.9727	1710	1755
0		1710.0159	1754.9733	1710	1755
10		1710.0138	1754.9736	1710	1755
20		1710.0139	1754.9729	1710	1755
30		1710.0137	1754.9725	1710	1755
40		1710.0128	1754.9735	1710	1755
50		1710.0125	1754.9736	1710	1755
20	L.V.	1710.0136	1754.9728	1710	1755
	H.V.	1710.0144	1754.9729	1710	1755

LTE:
QPSK:
Band 2:

10.0 MHz Middle Channel, $f_0=1880\text{MHz}$				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	N.V.	6.12	0.0033	pass
-20		-9.97	-0.0053	pass
-10		-6.13	-0.0033	pass
0		6.17	0.0033	pass
10		7.92	0.0042	pass
20		6.46	0.0034	pass
30		-6.52	-0.0035	pass
40		7.18	0.0038	pass
50		-9.69	-0.0052	pass
20		L.V.	-8.17	-0.0043
	H.V.	-7.05	-0.0038	pass

Band 4:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	1710.1166	1754.8738	1710	1755
-20		1710.1158	1754.8736	1710	1755
-10		1710.1152	1754.8737	1710	1755
0		1710.1154	1754.8738	1710	1755
10		1710.1147	1754.8757	1710	1755
20		1710.1142	1754.8755	1710	1755
30		1710.1139	1754.8754	1710	1755
40		1710.1130	1754.8756	1710	1755
50		1710.1129	1754.8749	1710	1755
20		L.V.	1710.1128	1754.8748	1710
	H.V.	1710.1024	1754.8742	1710	1755

Band 5:

10.0 MHz Middle Channel, $f_0 = 836.5\text{MHz}$				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	N.V.	-8.48	-0.0101	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	0.0060	2.5
30		-6.62	-0.0079	2.5
40		-8.73	-0.0104	2.5
50		-7.05	-0.0084	2.5
20	L.V.	8.99	0.0107	2.5
	H.V.	-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	N.V.	2500.8796	2569.9855	2500	2570
-20		2500.8792	2569.9947	2500	2570
-10		2500.8788	2569.9856	2500	2570
0		2500.8786	2569.9762	2500	2570
10		2500.7987	2569.9828	2500	2570
20		2500.7879	2569.9425	2500	2570
30		2500.7757	2569.9337	2500	2570
40		2500.7656	2569.9926	2500	2570
50		2500.7562	2569.9925	2500	2570
20		L.V.	2500.7528	2569.9835	2500
	H.V.	2500.7431	2569.9741	2500	2570

Band 12:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	699.9633	715.8872	699	716
-20		699.9641	715.7728	699	716
-10		699.4523	715.7458	699	716
0		699.4427	715.7632	699	716
10		699.3232	715.5417	699	716
20		699.4421	715.5284	699	716
30		699.2289	715.6323	699	716
40		699.3347	715.6314	699	716
50		699.4242	715.5454	699	716
20		L.V.	699.3372	715.5672	699
	H.V.	699.3374	715.5678	699	716

Band 17:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	704.7895	715.9836	704	716
-20		704.7729	715.9825	704	716
-10		704.7368	715.9725	704	716
0		704.7218	715.8898	704	716
10		704.7326	715.8875	704	716
20		704.7265	715.8794	704	716
30		704.7435	715.8972	704	716
40		704.7532	715.8881	704	716
50		704.7232	715.8847	704	716
20		L.V.	704.7447	715.8826	704
	H.V.	704.7335	715.8799	704	716

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	N.V.	2570.8378	2619.9826	2570	2620
-20		2570.8077	2619.8725	2570	2620
-10		2570.7246	2619.7631	2570	2620
0		2570.6155	2619.6557	2570	2620
10		2570.5056	2619.5425	2570	2620
20		2570.3933	2619.4321	2570	2620
30		2570.2838	2619.3225	2570	2620
40		2570.1729	2619.2125	2570	2620
50		2570.1618	2619.1326	2570	2620
20		L.V.	2570.1520	2619.1222	2570
	H.V.	2570.1021	2619.1124	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	N.V.	2535.9758	2654.9871	2535	2655
-20		2535.8678	2654.8852	2535	2655
-10		2535.7565	2654.7766	2535	2655
0		2535.6425	2654.6652	2535	2655
10		2535.5327	2654.5556	2535	2655
20		2535.4228	2654.4438	2535	2655
30		2535.3159	2654.3351	2535	2655
40		2535.2157	2654.2237	2535	2655
50		2535.2939	2654.1065	2535	2655
20		L.V.	2535.8622	2654.0032	2535
	H.V.	2535.8524	2654.0012	2535	2655

Band 66:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	1710.0241	1779.9728	1710	1780
-20		1710.0238	1779.9727	1710	1780
-10		1710.0236	1779.9839	1710	1780
0		1710.0235	1779.9756	1710	1780
10		1710.0237	1779.9755	1710	1780
20		1710.0228	1779.9747	1710	1780
30		1710.0257	1779.9749	1710	1780
40		1710.0256	1779.9756	1710	1780
50		1710.0229	1779.9828	1710	1780
20		L.V.	1710.0225	1779.9727	1710
	H.V.	1710.0226	1779.9775	1710	1780

16QAM:**Band 2:**

10.0 MHz Middle Channel, f ₀ =1880MHz				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Result
-30	N.V.	-5.38	-0.0029	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	0.0030	pass
20		L.V.	6.05	0.0032
	H.V.	7.52	0.0040	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	N.V.	1710.2966	1754.7672	1710	1755
-20		1710.2958	1754.7562	1710	1755
-10		1710.2751	1754.7672	1710	1755
0		1710.2652	1754.7452	1710	1755
10		1710.2633	1754.7435	1710	1755
20		1710.2643	1754.7626	1710	1755
30		1710.2572	1754.7625	1710	1755
40		1710.2658	1754.7652	1710	1755
50		1710.2636	1754.7752	1710	1755
20		L.V.	1710.2621	1754.7536	1710
	H.V.	1710.2715	1754.7524	1710	1755

Band 5:

10.0 MHz Middle Channel, f ₀ =836.5MHz				
Temperature (°C)	Voltage Supplied (V _{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	N.V.	-6.08	-0.0073	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	0.0090	2.5
30		6.43	0.0077	2.5
40		-6.17	-0.0074	2.5
50		-6.44	-0.0077	2.5
20		L.V.	6.34	0.0076
	H.V.	-6.89	-0.0082	2.5

Band 7:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	2500.8456	2569.8376	2500	2570
-20		2500.8428	2569.8551	2500	2570
-10		2500.7641	2569.8425	2500	2570
0		2500.7255	2569.8537	2500	2570
10		2500.6326	2569.8285	2500	2570
20		2500.6239	2569.7829	2500	2570
30		2500.6351	2569.7836	2500	2570
40		2500.6327	2569.8426	2500	2570
50		2500.6226	2569.8457	2500	2570
20		L.V.	2500.6235	2569.8352	2500
	H.V.	2500.6144	2569.8238	2500	2570

Band 12:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	699.3125	715.7364	699	716
-20		699.3133	715.6225	699	716
-10		699.3015	715.5954	699	716
0		699.2919	715.6124	699	716
10		699.1724	715.3909	699	716
20		699.2913	715.3776	699	716
30		699.0781	715.4815	699	716
40		699.1839	715.4806	699	716
50		699.2734	715.3946	699	716
20		L.V.	699.1864	715.4164	699
	H.V.	699.1866	715.4176	699	716

Band 17:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	704.6387	715.8328	704	716
-20		704.6221	715.8317	704	716
-10		704.5862	715.8217	704	716
0		704.5713	715.7394	704	716
10		704.5818	715.7367	704	716
20		704.5757	715.7286	704	716
30		704.5927	715.7464	704	716
40		704.6024	715.7373	704	716
50		704.5724	715.7339	704	716
20		L.V.	704.5939	715.7318	704
	H.V.	704.5827	715.7291	704	716

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	N.V.	2570.9877	2619.9856	2570	2620
-20		2570.8928	2619.8769	2570	2620
-10		2570.7825	2619.7695	2570	2620
0		2570.6731	2619.6556	2570	2620
10		2570.5636	2619.5492	2570	2620
20		2570.4526	2619.4345	2570	2620
30		2570.3412	2619.3294	2570	2620
40		2570.2375	2619.2113	2570	2620
50		2570.1287	2619.1125	2570	2620
20		L.V.	2570.2178	2619.8785	2570
	H.V.	2570.2134	2619.7643	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	N.V.	2535.9456	2654.9655	2535	2655
-20		2535.8442	2654.8582	2535	2655
-10		2535.7372	2654.7486	2535	2655
0		2535.6266	2654.6375	2535	2655
10		2535.5138	2654.5284	2535	2655
20		2535.4175	2654.4182	2535	2655
30		2535.2988	2654.3587	2535	2655
40		2535.1882	2654.1986	2535	2655
50		2535.1829	2654.1882	2535	2655
20		L.V.	2535.1618	2654.0765	2535
	H.V.	2535.0572	2654.0344	2535	2655

Band 66:

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	1710.0277	1779.8392	1710	1780
-20		1710.0249	1779.8444	1710	1780
-10		1710.0246	1779.8363	1710	1780
0		1710.0275	1779.8358	1710	1780
10		1710.0265	1779.8362	1710	1780
20		1710.0239	1779.8333	1710	1780
30		1710.0225	1779.8341	1710	1780
40		1710.0246	1779.8368	1710	1780
50		1710.0233	1779.8376	1710	1780
20		L.V.	1710.0258	1779.8356	1710
	H.V.	1710.0252	1779.8354	1710	1780

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